

IND

MODEL CAR Science

AUGUST 1969

THE "DUNE DOODLER"



IN THIS ISSUE:

**BASIC
CUSTOMIZING
TIPS**

**A NEW
U.S.R.A.
COLUMN!**

See page 63

**SOLDIER
LIKE
A PRO!**

**BUILD
A 1/24 SCALE
"SCREAMER"**



Tom Daniel's zany new three wheeler
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August, 1969

MODEL CAR SCIENCE

Volume 7, Number 8



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Model Mail

FULL SIZE CARS IN MCS

I'm an avid reader of MCS, but each month I feel you are cheating me out of part of my 50 cents. If I want to see stories on real racing cars, I'll buy a real car magazine. Please keep *Model Car Science* a model mag.

Jeff Hunter
Bronx, N.Y.

I really appreciate the coverage MCS has given to articles on actual cars. It would seem to me that every MCS reader is a full-size car fan first and model builder second so everybody should be satisfied. As for me, I don't have enough money to buy all of the full-size car mags every month so the MCS articles are a real help.

James Blackley
San Francisco, Calif.

Every time you run a story on a real car you blow my mind. I keep looking at the photos wondering how the model builder made the car look so real. It really makes me mad when I find out it really IS a real car! Cut it out, huh? We want to see model articles in a model magazine.

Bill Williams
Dallas, Texas

Well guys, personally, we agree with James. Photos of real cars should be welcome by most of our readers who are searching for ideas to build different cars than kits offer, or who are looking for detail tips from real life cars. MCS is really YOUR magazine. How do the rest of you readers feel? Let us know if you want to see more or less pages of real car features here.

WANTS OLD DRAGSTER PHOTOS

I have given up modeling several times and I always come back with even more enthusiasm because of MCS. Now I'm back again, but I only want to build earlier dragster models. Can you help me with photos of some of the early dragsters? Also, here's a tip: for the heavy canvas transmission shields used on many NHRA dragsters, cut a piece of Kleenex, wrap it around the model's trans and glue in place. When the glue dries, cut the edges of the Kleenex to match the ends of the trans and paint olive drab or silver.

Creed Dew
Newburyport, Mass.

Thanks for the tip, Creed. We're sorry we can't help with the photos, but maybe some of our other readers can.

SPEED TIP FOR ANY HO TRACK

I've found that "Dri-Lube," or other brands of powdered graphite, to be an excellent lube for HO cars. Hardware stores sell the stuff for less than a dollar a tube and one tube will do hundreds of cars. I put it on axle bearing areas, between gears, and even on the guide pins. It reduces friction to almost nothing and doesn't attract as much lint as "wet" lubricants.

Thomas Till
South Haven, Mich.

Sounds like a good tip, Tom. If you do use graphite be extra careful to use only a trace and keep it well away from ANY parts of the motor (i.e. do NOT use it on motor shaft ends) and away from the surface of the track. Graphite will conduct electricity and a bit of the powder on your motor will short it out and "cook" the windings. Similarly, a bit of the powder on the track surface could short out the pickup strips and ruin either car, controller or power pack!

ULTIMATE HO TRACK

I have found a way to build a track like your "Ultimate HO Track" with less work. You don't have to go to the trouble of routing the slot and you still have a solution to lack of power across the track sections with my method. I merely bend the retaining tabs that hold the metal pickup strips in standard plastic track, remove the metal strips and connect the track in the normal manner. I do leave the strips in the terminal track section, though. I use a roll of 1/4" copper tape (with adhesive back) and cut it in half to get two 1/8" wide strips. I then

place the tape over the slots left in the track where the stock pickup strips were. If I'm careful, I can lay a continuous strip of tape around the whole track. The power is picked up by the tape where it passes off the terminal track.

Frank Lopomo
Port Monmouth, N.J.

You might just have something here, Frank, but we'd recommend our readers try it out on a small oval of track before tearing the pickup strips from all their track sections. If you do use Frank's idea, we'd suggest you screw the track sections down to the tabletop, butting each firmly together. When using tape for pickup strips you usually have to convert the pickups on the cars themselves to a form of braided wire pickup by soldering a short piece of 1/24 scale copper pickup braid to the car pickup strip. Also, with Frank's idea, you must replace ALL of the copper tape if and when you change the shape of the course. You DO save the task of routing the slot though.

WHERE TO BUY PARTS?

I read MCS every month and I often want to buy some of the kits or parts I see. The only local source I have for such items is a toy store with a small hobby department. Where can I buy what I need?

John MacDonald
Laramie, Wyo.

Some of the best sources of these parts are the mail order supply houses. Check the pages of MCS for the catalog prices and addresses of Auto World, Discount Hobby Distributors, and Parma International Raceway. From what we hear from our readers, all three give excellent service and between the three firms, we're sure you'll find whatever you need. You can check the yellow pages for any of the larger cities you may visit under the headings "Hobby & Model" "Instruction Supplies-Retail" and/or "Slot Car Race courses."

WANTS TO START A CLUB

To all HO fans in the Kalamazoo-Portage, Mich. area: I am trying to start an HO slot car club. If you are interested please contact me at 7238 Capri.

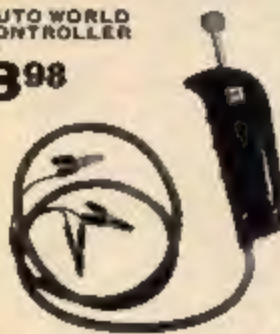
Scott Burrell
Kalamazoo, Mich.

We don't normally print requests such as yours, Scott, but it gives us a chance to give you or anyone else some ideas on scrounging up local members. Try placing a small card ad with your request on display in the local toy or hobby store where you buy your parts and cars. Ads on supermarket bulletin boards can also net you some nearby members. Some towns have newspapers that feature nothing but want ads. In many cases the ads are free or nearly so. They, too, can help you find members to form a local club.

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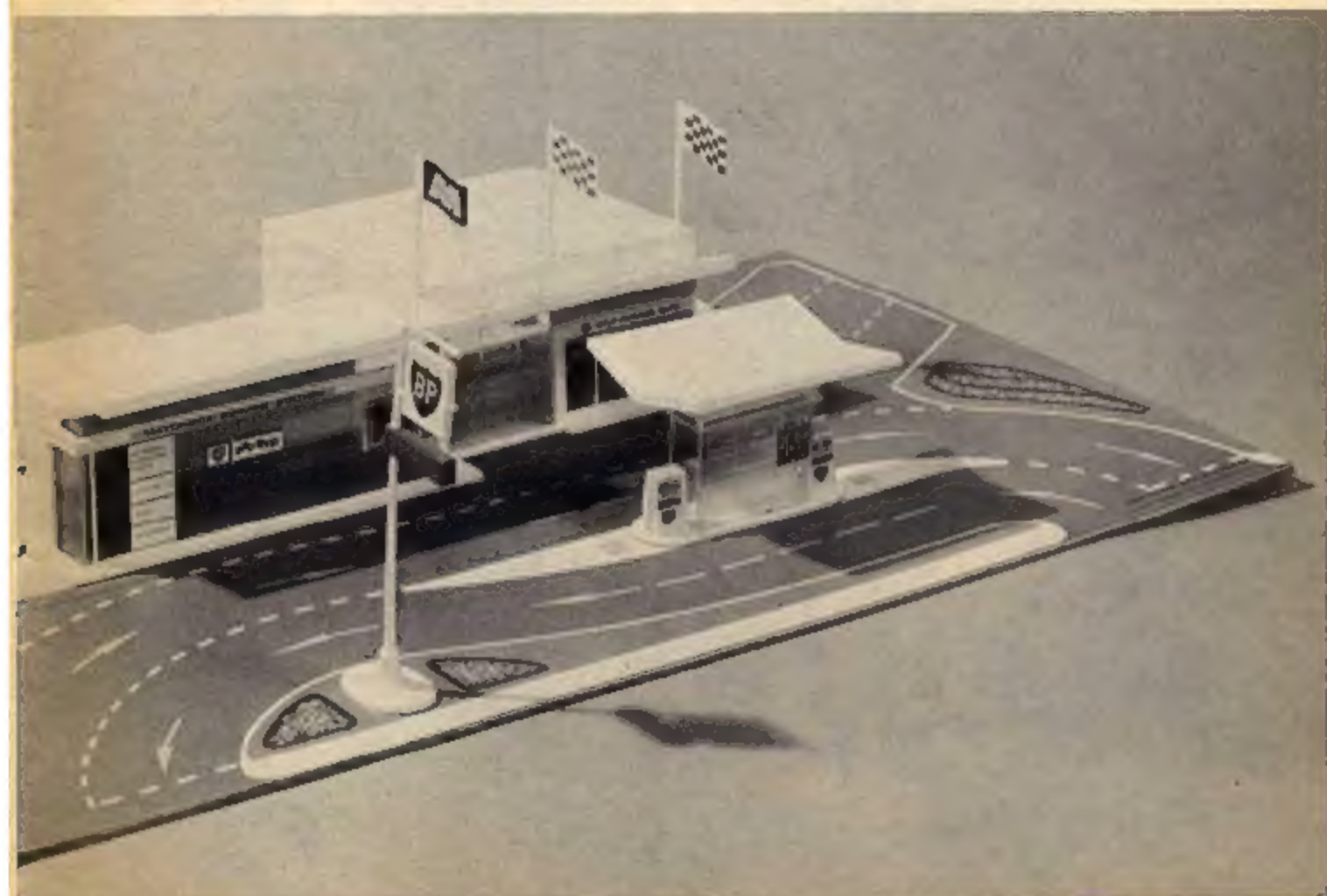


A set of miniature international auto racing flags (in the proper colors, too) for desk, den or display, can be yours for \$5.95 from AUto World, Dept. MCS, Box 961, Scranton, Pa. 18501. Look great on your desk. Flags are made of fine cloth, in a special holder.



Champion's "Orange Picker" special competition motor is on the market and ready to win! Priced at \$14.95, the motor is available in 26 or 25 wire form, with fiberglass commutator, specially annealed armature, "DZ" magnets and bullet-proofed endbell. A new silicone stabilized gimbel bearing is used to dampen vibration. It's a screamer! Available at your local slot racing shop.

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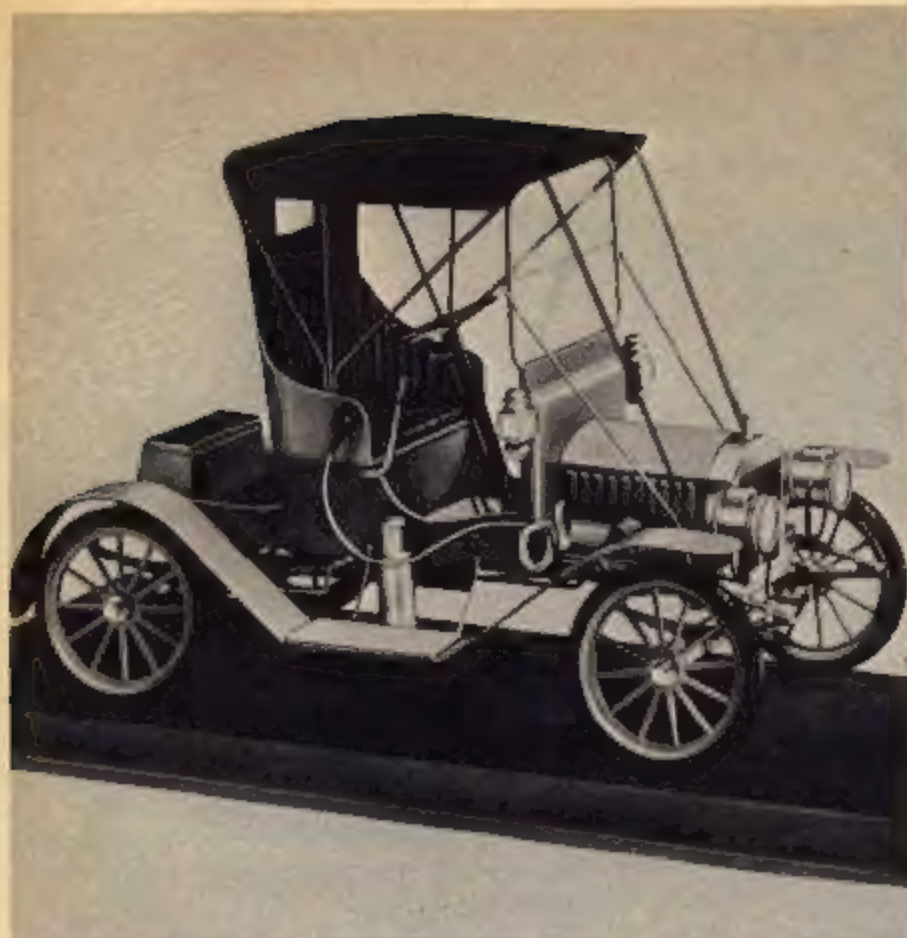
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Mike is now married and he and his



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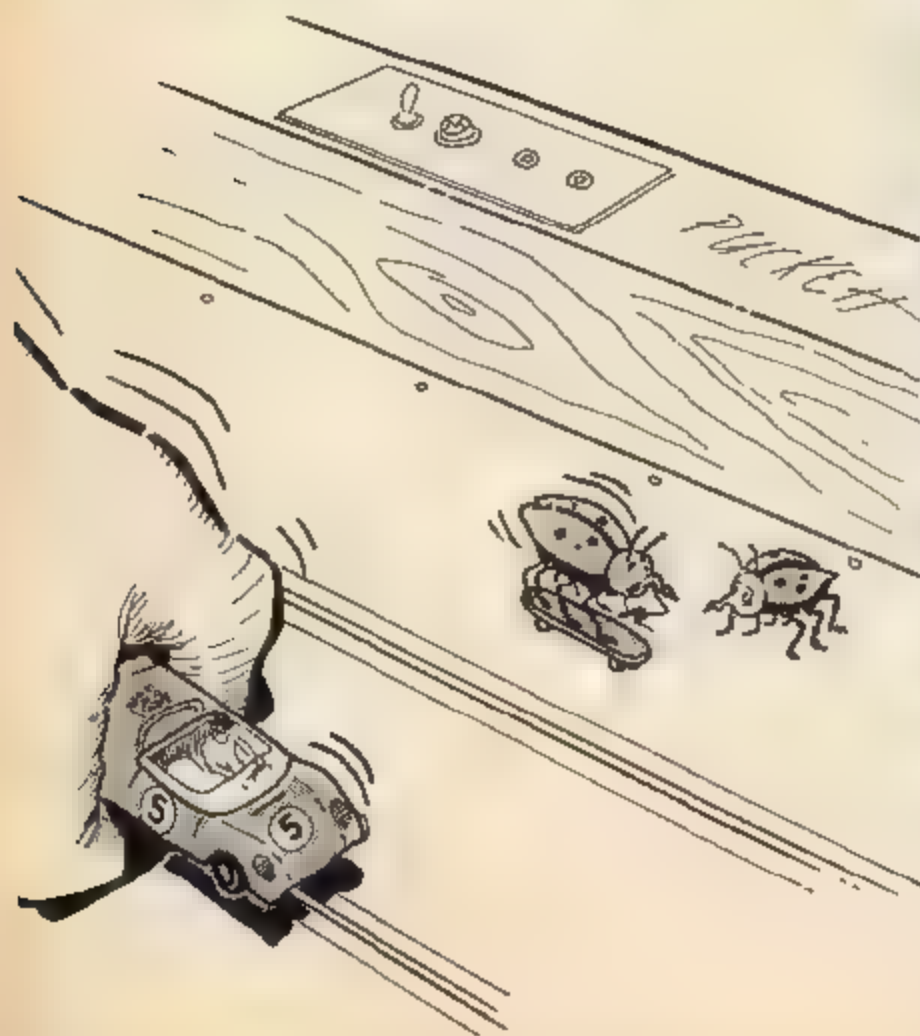
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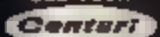
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Eastern Viewpoint

Many words and much ink have been used over the years trying to tell about one segment of the sport that for me, anyway, is the way to go. Once again 1/32 scale is being re-examined by those manufacturing equipment for the market place.

The blood is warmed, the heart feels a pang and I, along with many others, look forward to some decent equipment designed and made just for this scale and not big 1/24 stuff being reworked to make do. It hardly ever does anyway.

Being a member of one of the most active 1/32 clubs in the East, I was privileged recently when representatives from Phase III came down one evening to show us some new 1/32 chassis designs they were thinking about introducing. Seldom does a manufacturer take the opportunity to discuss a product with enthusiasts before letting it loose on the market. This was refreshing, this was smart, this is the way to do it.

The people from Phase III had a little angle-winder chassis all polished, powered and ready to go. It did, and very well. Everyone was pleased. Then, we put the ruler to it. It would never make it in a club meet of enthusiasts. We showed the manufacturers why, showed them things like Pontiac G6 tread dimensions etc.

We talked, suggested and they listened. Then, they talked and we agreed, all of us. Seems they were weary of the run around that they and other manufacturers have been put through in 1/24. Every week a new tire width, a new chassis dimension, a new this or that. We agreed it's a lot easier on the home scratch builder to change daily than the manufacturer that builds up a stock to ship and has it become obsolete before it gets out the door. Sure they want to give the market what it wants, but what does it want? And can't it come up with some workable ideas and designs that would be around long enough so that everyone could get something out?

We told them the problem was not as great in 1/32. We told them there were a good set of requirements that don't change weekly, that there are specs that could be used and would be

effective for quite some time. We gave them a copy of the new NAMRA rules handbook that spells it out clearly. We gave them some averages for current Can-Am machinery and some dimensions for scale competition tires, and we said goodnight...

One week later we were testing two little chassis, one of which is already on the market, the other announced. Both of them can be fitted with motor and tires, be scale and run mighty quick in any scale meet anywhere in the world and have a good chance of winning it. Race winners right out of the box? Not quite, but so close that a little tuning with a bit of lead here and there to compensate for a particular track and the power of threat is in your hand right out of the box.

Phase III's new 1/32 angle-winder is not the first chassis of this configuration or size to make the scene, in fact it's one of the last. But the best Care, workmanship and quality are there, telling you that nothing is going to bind or be crooked even before you start.

A month or so back I had the rare privilege of running a Ruskit ready-to-run 1/32 car brought back from the Chicago Hobby Show. The car, as was, was fantastic. What it lacked in brute power could be attributed to the ancient motor it was forced to use. But you would be hard put to get any car, home-built or otherwise, to out-handle it.

A light was shining on the horizon! Last week I purchased two more from a local shop. These were the production jobs and they did not have the handling the original prototype had. Why? I don't know. I have been over all three cars and can come up only two differences, and only one of these could for some reason cause the loss of handling. The production cars have a better motor, so it's not that. The production cars have the same identical chassis construction except for two bends. In the original these bends are 90 degrees; in the production version the same bends are a great deal less. Granted there must have been a good reason for the change, but it sure does effect the performance. And we wonder why, when you have something good it cannot be left alone.

We have now all seen Dynamic's 1/32 angle-winder advertised. As of this writing I have yet to see one for sale. When it is ready to be had it will make number seven in the new line of 1/32 chassis that can be had for about \$10.00. This includes RTR stuff that could, with little work, be modified to run hot clubs events and plain angle-winder and inline chassis that are sold as such, no more. Now, you tell me, good, bad or indifferent what have you, the 1/32 enthusiast, ever had such a choice?

A good set of scale and matching front and rear wheels is still hard to come by over the counter. Those in this part of the country don't suffer as much with two very small outfits catering to their needs, scale needs.

Sure they come high, you know the prices. But they are without equal in quality and material, plus that all important TLC bestowed on each little wheel.

As far as bodies go, Dynamic promised some very interesting stuff, but they've gone the route with the overall flat 1/24 look. 1/32 scale fans prefer scale-appearing shells and for this we must turn to Lancer who, though terribly slow in getting new stuff out, at least get it out looking like the real thing. Then, of course, there is always England but careful shopping here is the watchword. You could come away with a very scale shell that won't permit the use of the popular car motor or the other end of the stick, a 1/32 Ferrari Can-Am 612 that will drop over, with room to spare, any other 1/32 shell you now run.

The manufacturers are taking another look at this scale. They can hardly afford not to. Every buck helps keep the wheels turning. After all, isn't Mura going into HO? Ditto Champion. And Mini Wheels made the plunge some time ago. Now perhaps they will recognize the fact that 1/32 is here too. It always has been, it will never go away. There are just too many more enthusiasts than super hot pro thumbs walking around.

Now a word of caution, and this, my own opinion. No one myself included, ever said that all you have to do is tap the 1/32 market and settle back to count the long green as it pours in. No two ways about it, the 1/32 enthusiast spends as much, if not more money, on his stable than the 1/24 racer, at least in this part of the country. But there just aren't, I don't think, enough of them to pull everyone out of debt and put them on a big house on the hill. And you know I feel the same way about the 1/24 market. If I'm wrong, good, but do me a favor, make a mental check of the shops that were and those that still are.

The present market may just be all here is. If so, not the end of the line, and if it is all there is, it is without 1/32 segment of it being as yet really untouched. So any kindness shown this segment could be a shot in the arm.

Can you imagine factory sponsored teams sent out to show the 1/32 crowd the way around? But then if this were to happen, can you imagine the reworking of tracks that would be required to make them suitable for these smaller cars that really go as fast as the big ones. Few shop owners will appreciate that and so few will enjoy the spending of the 1/32 people who could be coming in not only to buy, but to race on that really big layout.

As in indy, where after every Memorial Day it is mid they just can't go any faster, I watch 1/32 cars get heavier. Some well up and beyond what any respectable 1/24 car would be caught at. And still they scream with such brute force that one wonders what's ahead. The components

Continued on page 64

THE ROOT BEER BARON

By Robert Schlie chof

MATING PARTS FROM TWO
OF MONOGRAM'S WILDEST
KITS EVEN CAN PRODUCE
AN EVEN WILDER ROD!





Monogram's Tom Daniel-designed rods incorporate some of the most insane, yet practical, styling yet on either a model or a real car. Each of the Daniels vehicles, from the Red Baron to the Tijuana Taxi, is based on an integrated styling theme. What would happen, we wondered, if two or more of these themes were combined into a single rod? Several Monogram kit combinations appeared plausible, but the creation of a "Root Beer Baron" seemed the most practical as a starter. The fact that the styling themes of both vehicles is near-World War I in character serves to integrate the final appearance of the vehicle.

A look at the completed rod conjures up visions of a bespectacled German driver zapping up to an imaginary Maginot Line to deliver cold refreshments to the troops. All very stubby, very efficient, and verrry German — but fast!



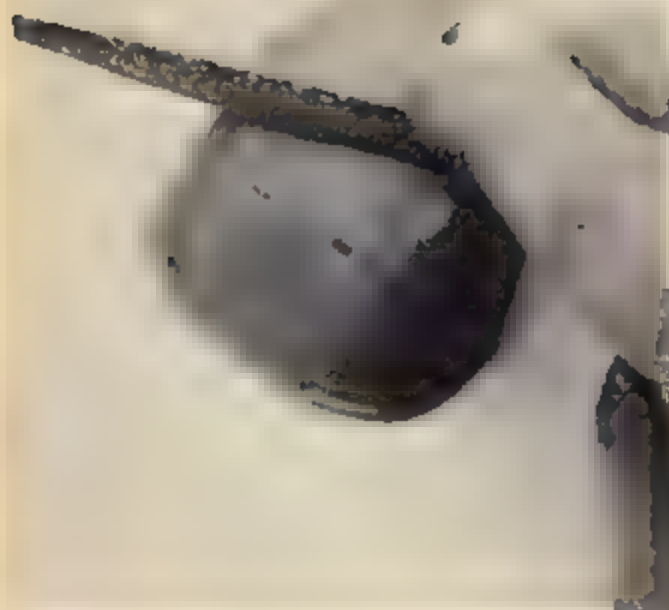
The body, radiator, wheels, and tires from Monogram's Red Baron kit (right) are mated to the chassis/engine/bed from the Beer Wagon to yield our new "Root Beer Baron" super rod.



The chassis rails must be removed from the Baron body to fit it to the Beer Wagon chassis. Cut rear with saw



Engine, oil pan and balance of frame rails must also be cut from the bottom of the Red Baron body/chassis piece.



File away any traces of oil pan and frame rails. Rear deck bottom must be perfectly smooth.



Finish off rear deck bottom with No. 600 wet or dry emery paper. Bottom need only be flat as it won't show later.



The stock Beer Wagon engine must be moved forward about 1/16" to allow Red Baron body to clear truck bed. Cut off two rear locating tabs from 'wagon frame.



Temporarily position truck bed on its locating tabs while Red Baron body is glued to chassis. Remove truck bed and paint chassis/body a metallic "root beer."



Truck bed is painted a flat tan with gold chains and sign trim. "Root Beer" letters are cut from "Red Baron" decal (Two would be needed to letter both sides). Second "o" is a trimmed "26" "T" is made from part of a "d" and part of an "r." "5c" is from Beer Wagon decal sheet.



Faint engine and interior gold to help carry out the "root beer" brown/gold theme of body and truck bed. Holes in Red Baron wheel backs must be enlarged to fit truck axles.



Attention to details like fit of engine, body, and wheels, with thoughtful color match or contrast can make many kit combinations as successful as this "Root Beer Baron" -- both starting kits are based on WWI-vintage bodies and chassis.

BUILD THE "SEMI-ISO"



SOMETHING OLD, SOMETHING NEW MAKES A GREAT CHASSIS!

By Floyd Manly

Something old, something borrowed means something hot! The something old is the Iso-fulcrum chassis. The something borrowed is the bat pans and the something hot is the Semi-Iso. The true "Iso" chassis has its

fulcrum back at the rear wheels. On this model we've moved the fulcrum up to half way between the axles. With a big legal diaplane on the rear of the body the forward speed of the car helps keep the pickup in the slot. The

bat pans eliminate the hazard of turning turtle in the corners.

You're not going to believe any more I say about the beautiful handling of this car until you build one and try it for yourself, so let's get started.



Build up a champion motor bracket with a rail of 1/16" piano wire on each side. The Champion drop arm shoe hole is 4-7/8" forward of the rear axle. Solder on the 3/32" tube for the fulcrum. Solder the side rails,



A guide shoe washer soldered to the body of the drop arm will be needed for spacing and it keeps the shoe from slopping from side to side.


20/Model Car Science



Here's the front wheel assembly, almost complete. The wheel base will be four inches. Note the extra "L" shape pieces in between the 1/16" spaced rods for more strength.



Build up a set of champion bat-pans per instructions. Add that extra rod you see to keep them from bending. You'll have to file away about 3/32" from the outside of each pan for wheel clearance.


 Cutting out the front wheel viewing ports serves a functional purpose. It lets the air out front under the body that would make it float at high speeds.



Assemble the batpans so the fulcrum rod fits through the down stop flanges and solder the pan tubes to the outside rail on each side. Don't solder the fulcrum rod yet!



Now we've got a complete chassis. The fulcrum rod should be soldered to the front wheel rail tubes to keep it in place.



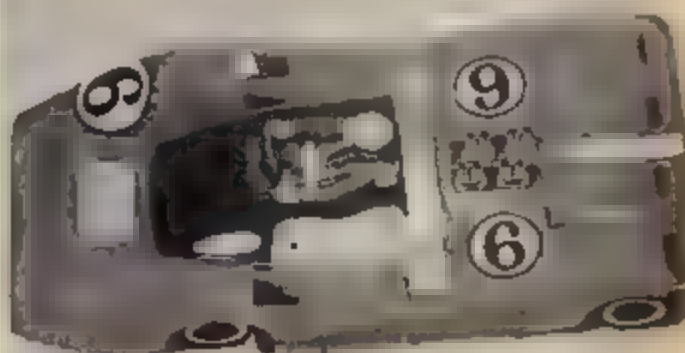
A bottom view to show the simplicity of design. The side rails are 1/16" spaced which will give you a chassis 3-1/4" wide. If you want a narrower chassis, don't space the rails.



Here's how the Semi-lao works. Its fulcrum is right at the half way point. The tab in the middle of the drop arm is bent so that when the front wheels are on the ground the weight of the body and front assembly keep the flag in the slot.



Solder on a pair of damper springs on each pan to stop vibration and body flutter. If you've followed directions so far, the guide post will be 7/8" in front of the axle tube.



The motor and body is your choice but I'm partial to the "Elfin's" (by Champion) low profile and wedge shape frontal area.

HERE ARE THE RESULTS OF THE FIRST ANNUAL MODEL PRODUCTS CORPORATION INTERNATIONAL MODEL CAR CUSTOMIZING CHAMPIONSHIP IN WASHINGTON, D.C.

MORE MPC CONTEST WINNERS

The first Annual Products Corporation International Model Car Customizing Championship contest, held in Washington, D.C., is now history. Held in conjunction with the 12th Annual Rod & Custom Car Show, sponsored by the Rams Rods Car Club and judged by Sy Gregorich of Promotions, Inc., this contest was one of the most successful this season with 227 entries.

Much of the credit for this impressive turn out goes to WINX Radio Station, which co-sponsored the contest locally.

Model Car Science congratulates all concerned with this contest - particularly the builders of these fine cars.



1st place in the Adult class - Richard Hines, Jr., age 20, took the *Best of Show* award. Richard hails from Silver Springs, Md.

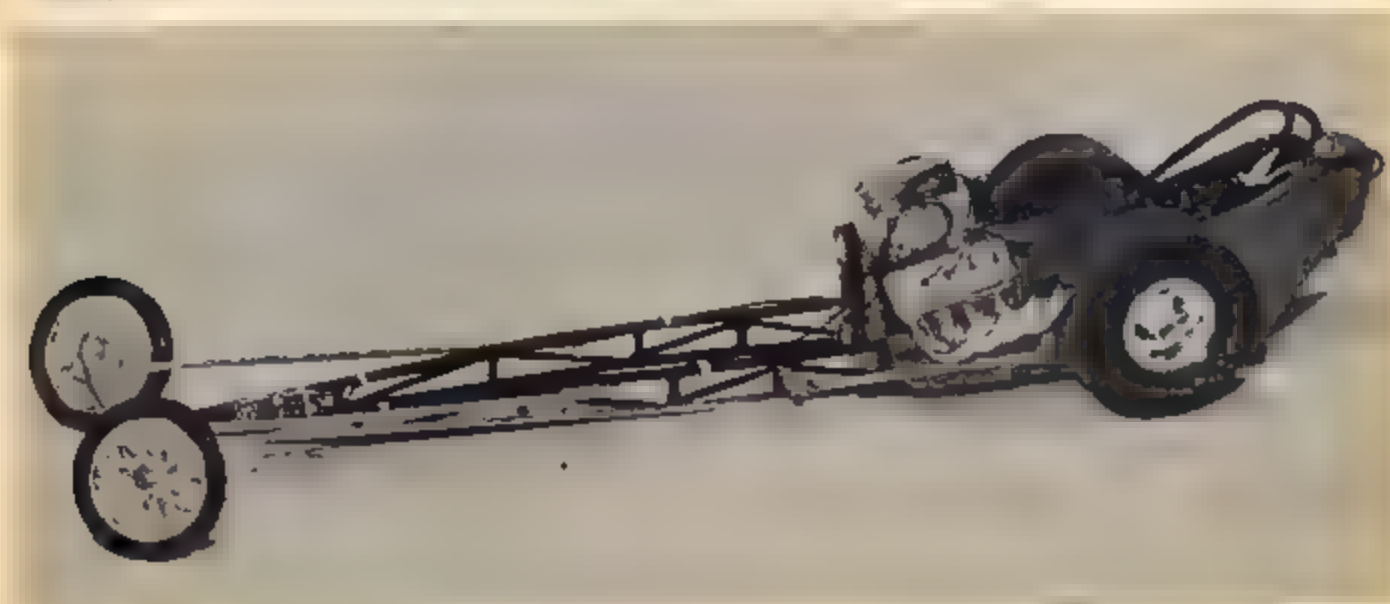




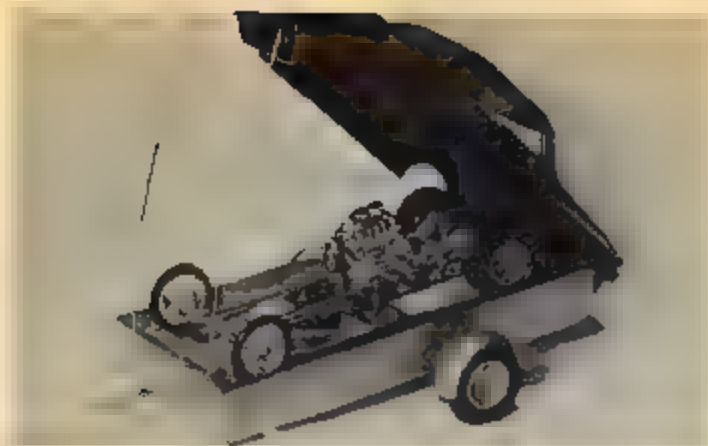
The second place in *Adult Class*, and the *Best Paint* award both went to Gerald Foster, of Pasadena, Md



Thud in the *Adult Class* was Ron Hargrove, Wheaton, Md.



First place in the *Senior Class* went to Mark Harris, of Kennington, Md.



Second in Senior Class was taken by Bill Japser, Washington, D.C.



Top Junior Class honors went to Al Davis, Jr., of Moorestown, N.J.



Third in Senior Class went to Kevin Leser, Silver Springs, Md.



Second in Junior Class was won by Mike Lacey, Alexandria, Va.



The Lacey name took third place in Junior Class too, this time David Lacey, of Alexandria, Va.



The Most Original award went to Roger Payne, Manassas Park, Va.



The Best Detail trophy went to John Kidder, Hyattsville, Md.

Southern Sampling

"You've come a long way, baby!" There's a popular tune that fits perfectly! Anybody who has been in slots for more than two years will know that the sport really has come a long way.

A lot of names have made their splash on the scene, then trickled down to not even leave a damp spot. We "old timers" can sit around the cracker barrel and toss around names like *Chassis*, *Pittman*, *Globe*, *Wilson*, and they probably mean as much to you as when you daisied out around discussing the *Hudson*, *Henry I* and *Packard*, all great names in their time but they've been replaced by more aggressive and progressive names like *Mustang*, *Camaro*, *Lotus*, *McLaren*, *Chapparral*.

In slots, three years ago, nobody really heard names like *Champion*, *Mura*, *Cobra*, *Phantom III*, but they're here now and among the main force that's keeping the sport alive. You may not believe that just a few years ago people were carving cars out of balsa wood to race, and you've got to be old enough to have to remember running on Monogram "Tiger paw" tires.

I suspect that in three years we'll be saying the same thing. Nowadays, the goodies my friendly postman brings are few and far between but what I do get is good!

ARKAY is typical of the new breed of manufacturers. A couple slot car sets decide they have something good and try to market it. If the public buys, then they offer something else and pretty soon they have a going business. **ARKAY** is starting with a pre-formed piano wire motor mount bracket that is good, and well worth 79 cents to anybody that scratch builds. They've also got motor brush springs in three degrees of tension — light, medium and heavy. Naturally the lightest pressure possible is best to hold down brush and commutator wear, but you may need to use heavier springs to prevent brush arcing which is worse because this creates pits on the commutator and slows the motor down.

Riggers is another. They started with some good time just when we were all banging on dealer's doors for tires. Now their latest catalog lists bodies, gears, frames and motors. The March "dream" book lists no less than 46 new items.

Champion is another story. They started with a better than average motor and now are the top supply house in the country. Progress in their plant is showing up by the hiring of

Jerseyite Ed Lewis as new product advisor. Ed has been in slots since Pluto was a pup and he knows some stuff! He had a track of his own for a couple years and is strictly a slot car nut who will be pushing *Champion* to come out with some new goodies.

Mailman came around today with a package from *Champion*. Nothing excites me more than a box of goodies from them unless it was a box of cookies from Mom when I was in Korea. With feverish hot hands I tore at the wrapping expecting motors, tires, bodies, frames, etc. What do I get? An orange. . . a big bright juicy Florida orange! Man, I've got bushels of them hanging from the trees in my backyard. That's like sending a peach to "GAWJA." The idea was to introduce their new "Orange picker" motor. What a crazy name, but anybody who will name a motor "Thumbprint" can just as easily name one "Orange-picker." The next day, another box — this time it's just an orange endbell from the motor with some features that make ya' wonder why you didn't think of them. A big problem solved is the front bearing chatter. *Champion* has soldered the oilite bearing to the endbell brass "bullet proofing" flange. This way the motor mounting screws hold the oilite in place and dampen any chatter that causes heat and would melt the end bell. Next day, still another box — with another dollar's worth of postage. These guys are crazy! Still no real w! Just the motor can this time with a new longed for "bullet bearing." They took the old floating white bearing and buttered it with silicone. The bearing oil flange but is dispensed by the silicone for trust armature running. Reworking the bearings at each end of the motor is letting them get over 120,000 rpm! Man, that is flat spinning. . . Just about the way my Dad did the first time I wrinkled a fender on his car. If the power in the "Orange picker" is as much as Pa had in his left hook — we've got a winner!

Bumper stickers are here! We've had 'em for Putt Putt Golf, Cypress Gardens, and Mei Jung Tournaments. Now we've got one for slot car racing. Pretty little thing. . . set "Follow me for fun. Go slot car racing" in Day-glow orange. The industry is promoting the sport this way to get more people curious over what slot cars are.

It's been a long time coming but low cost slot racing is almost here. A chassis-design is almost ready for manufacture, and the motor is gonna be a 27 gauge balanced and epoxied semi-stock that's been detuned to make it last. "Group Twenty" is the class name. The entire car will be sold as a kit for less than \$20.00 and no modifications whatsoever will be allowed. Watch for an announcement of a "Group Twenty" demonstration race with the "Jet Set" professional drivers. They'll be handed a "GT" kit the morning of a race, a couple hours before starting time. They'll assemble the kits, pass a technical inspection

and then stage a sprint race. The "Group Twenty" class will put everybody on an equal basis as far as equipment goes, and the winner will be the best driver. The cars will be a bit slower than the full bore "open" class, which means a lot of the tension will be gone and this class of racing will be more fun.

The idea is to put the fun back into racing. Pro racing is necessary to promote the sport and to provide a field laboratory for research and development of new ideas, but the average participant in the sport can't afford to race with the pros, without factory help. In pro racing a competitive car costs \$50.00, easy! Two or three are needed! At least five or six motors are necessary at \$15.00 — \$20.00 per! Then the time — at least eight to ten hours just to set a car up, without building a new chassis.

"Group Twenty" will mean that you'll be able to walk into the track, open your box, put your car on the track, and be ready to race. Anytime a few guys show up with G-20 cars, you can have a race and know your car is competitive with the rest. A kid who saved his money since Christmas can race with Bob Cozine, John Cukras, or Chris Vitucci and have the same chance, equipment-wise. The pressure, cost and tension of competitive racing will be gone and the fun will be back!

Meanwhile, while waiting for "Group Twenty" cars to come down to Florida, we're still running our 26D motor races. At first we used *Champion* 601's but after a few people were suspected of dewinding, epoxy balancing and commutator advancing, we switched to 607's. You can't mess with these 'cuz all that has been done. The 607 armatures are available for \$1.98 to drop into a 601 class!

I was there to witness this feat and to watch the *Mura Mini-Spectacular*. I won't cover the results of this race, but will spend the time to pass on bits of info about the cars. Every entry was an angle-winder. Most of the really fast cars had their plumber rigs mounted on the drop arm instead of the side rail. The pros were using old Cox non-level spur gears. This amazed me, but a logical explanation from Ray Gardner of *Champion* put me even. The old Cox gears are softer and absorb the shock of the gear teeth and will run just a little bit faster — if (and that's a great big IF) they're set up properly and you don't bang into anything on the track. One little ding and they're done. The steel bevel gears are still the best for the non-pro on weekend bashes. I'll stick to steel 'cuz I've yet to finish a race without at least one flight over the wall.

Finally got a complete "Orange Picker" with 24 wire and while still not knowing the significance of the name, I'll say that for \$15.00, *Champion* has a very hot motor! The "OP" has a poop sheet that claims up to 120,000 rpm and I believe it. But I still think "Group Twenty" is the answer!



OUR RESIDENT MADMAN COMES UP WITH A "BEAR" OF A STORY!

Once upon a lap time there lived a little girl slot racer named Chromelocks, who could waste any button puncher for fifty miles around - man, woman, or beast. . . or so she thought.

One day Chromelocks, attired in her silver Nomex fire suit, (her controller often got pretty warm!) wandered into Ma Geese's Slot Racing Parlor whistling Ludwig Beethoven's Unfinished Symphony. She had whistled her way to the part where Beethoven called it quitters, when she spied Big Jack Horner sitting in a corner changing his gear ratio with his thumbs.

Chromelocks smiled as she wandered toward the big man. "Hi, Jack. What's loose?"

"Hi, Chromey, Hows the girl?"

"Can't complain much, Jack. Wanta go a few quick laps for a soda?"

Jack looked at the cute 15 year old Teeney Bopper and smile Sheepishly.

"No man's gonna take you, Chromey; I'll give you the soda."

"Ah, keep it Jack. I was only putting ya on. . . 'sides, you're a friend and your cars junk. . ."

Chromelocks walked to a nearby stool and climbed on. "I'm gonna get stale, if I don't find some competition," she sighed sadly. "I've taken everything that fast from Storyville to Gretelswoods."

Jack's big boyish face looked up at the distraught young girl. "Just to the edge of the woods Chromey, how about in 'em?"

Chromelocks shot an evil eye at the big red-faced man, her voice turned icy. "Don't get me wrong," he stammered. "Have you ever raced in the woods? At a track I mean!"

Chromelocks, her eyes narrowing, leaped from the stool, grabbing Jack's lacy lapels. "What track in the woods? Spit it out!"

Jack whined from his corner. "I didn't know you didn't know! Honest, Chromelocks!"

"Come on, Jack, relax," soothed the girl. "Just tell me where it's at."

The big man reached with shaky hand into his left breast pocket. He retrieved a pen and an old instruction sheet for building a static model Cinderella Pumpkin dragster, eased out of Chromelocks' grip and leaned over the trackside rail. "I'll make you a map, it'll take you right to the place."

Chromelocks blasted out of Ma Geese's place on a dead run for her mini-bike. She flicked the switchpull on the

starter cord and mounted. A quick examination of the custom-made slot car box locked on the bike rack and she shot away down mainstreet, poppin' a beautiful 35 foot wheelie.

By and by she came to a huge stone wall which encircled Gretelswoods. Chromelocks stopped the bike and reaching in her belt, pulled out the map. She lowered the kickstand and climbed off, obviously dimayed. She looked first north, then south, then laid the map out on a large rock.

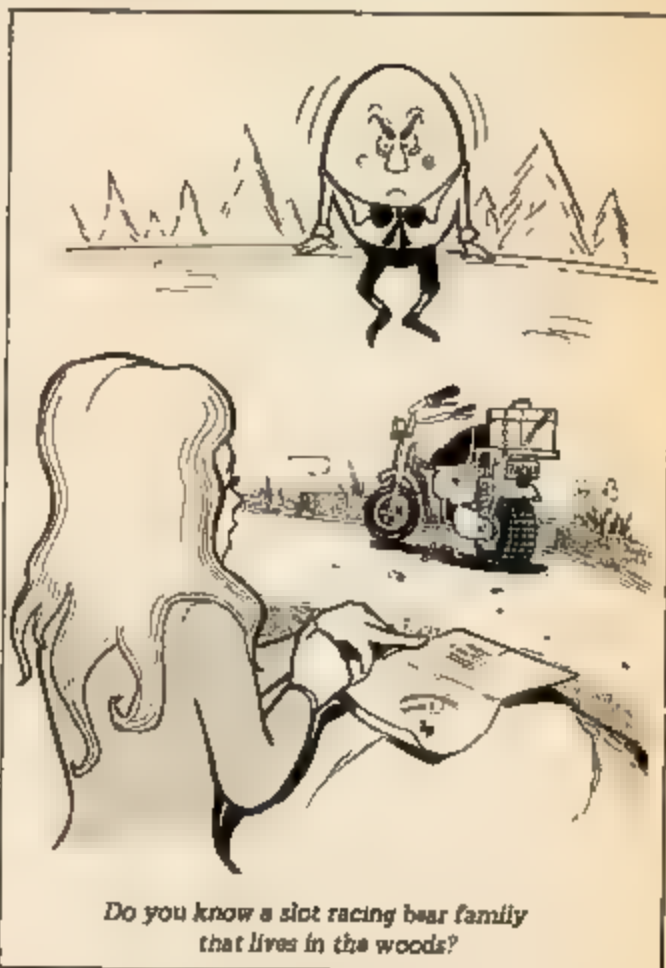
"Better move that bike, girly, before I do my thing all over it."

Chromelocks looked up toward the voice, her pretty mouth open in disbelief. The mysterious commentator was a huge egg dressed in 19th Century little boy clothes. He sat rather uncertainly on the wall's edge.

"What's your beg my egghead friend. . . suicide? You make an uncool move and you're omelet!"

"I know, dear girl," the egg returned roughly, "but that's my concern. Are you lost?"

"Yeah, as a matter of fact, I am. Do you know of a slot racing bear family that lives in the woods?" questioned Chromelocks.



"Why, you thinking of racing them, child? If you are, better get up here with me and jump. Least you'll have a slight chance of being successful."

The young girl bristled with obvious anger. "Lookyhere you yokester, I'll cream any man, woman or beast who can pack-up a controller."

"Don't get huffy-puffy, young lady. I don't care to discuss your thing, I just want to get on with mine. So if you really want to find them, go fifty yards up this path and turn right through the gate. Then just follow that road

till you see bears' house. It's about 3 miles, no more."

Chromelocks looked in the direction pointed out by the egg's white gloved hand and smiled. "Thanks, egghead. Next time I have breakfast I'll make it pancakes." And with that, Chromelocks walked to her mini-bike, started it and ripped off up the pathway, tossing a wave at the tottering egg.

Chromelocks leaned the mini bike when she approached the first gate and did dirt-track style through the entrance, showering rocks and dust over the sign reading "Gretels-woods - Residents Only." She opened the bike up to its top speed of 35 and riding the pegs with her toes, make like a lady motocross rider. She was just rounding a curve in the wooded roadway when she noticed an odd couple crossing her path. Locking up the bike in a tremendous broadside, Chromelocks managed to slide by and stop without hitting them. She looked back at the odd couple and smiled. They certainly were a strange pair, a roguish English tweed dressed grey wolf and a pretty young redhead girl dressed in mod-mini crimson from her scarf-cape combo to her Italian sandals.

"Whaaaaa big idea? You almost wiped us out!" snarled the wolf, baring his many yellow stained fangs.

"Not by the hair on your chiny-chin-chin, friend. I've ridden too many years to lose my cool now. However, I am sorry I scared you," spoke Chromelocks with some sincerity.

The other young girl quizzed, "Where are you going in such a rush?"

Chromelocks grinned, revved her mini-bike and answered, "I'm going to the Bears' House to teach 'em the way around their own race track. I'm a champion slot racer, case you can't tell."

"Really? I've got H.O. slot cars here in my basket. I'm on my way to Grandma's to have a few laps with the old girl and maybe scarf down some cookies."

Chromelocks smiled, then frowned and motioned the girl to come closer. "Who's your fangy friend with the ears?"

"Him? He's the nicest wolf. He was just walking with me and talking about H.O. racing."

"Yeah," said Chromelocks, "it figures. You'd better watch him close."

"Why?"

"Cause I've read the book. And besides, he looks more like a 1/24 scale racer than an H.O. type. I've got to go, now, see ya."

With that, Chromelocks gasped her mini-bike and shot off down the road at such speed that the wind literally ripped the leaves from the trees.

Papa Bear patted Baby Bear on the head, as the little one worked feverishly on his driving technique around the Little Bear Speed H.O. Raceway.

"Keep your thumb down as the car goes through the esses, boy. You'll gain quite a bit on others not so wise."

Mama Bear came into the playroom to join her family. She had just finished the dishes and smiled as she watched her young son racing. Someday she thought to herself, he would undoubtedly be a real champion, like Papa Bear. "Let's go for a nice long walk, boys, then come home and race some 1/32 scale," commented Mamma Bear, as she removed her apron.

Baby Bear and Papa Bear laughed, as both had instantly reached to unhook the controller.

Chromelocks came to a small rise and slowed her

mini-bike. Below and ahead of her was a small white cottage set back from the road, complete with red trim shutters, just as old Jack had said. The house had many flowers and a white picket fence around it. The mail box by the gate read "B. Bear and Family."

Chromelocks, a smile on her pretty young face, thought to herself, "At last, this must be the place." She idled the mini-bike down the hill toward the gate. Reaching it, she pulled the latch and swung the gate open.

Chromelocks throttled the bike and moved inside. She looked for a sign of life and not seeing any, drove the bike around in back of the little house, dropped the kickstand, killed the engine and hopped off. Unlocking her slot car box from the bike rack, she walked toward the front of the Bears' house. She climbed the wooden staircase and pounded the brass doorknocker three times. Chromelocks, not particularly long on patience, frowned at the lack of response. Curiosity got the best of the moment and she tried the giant door knob. The door swung open! After an instant or two, the young girl stepped inside.

She found herself in a large living room. It was comfortably furnished with small, medium, and large chairs arranged around a big coffee table. Down the hallway, she spied what looked to be a huge playroom. She took a deep breath and tip-toed toward the mystery room.

Eureka! There, inside the room, was the most fantastic slot racing layout Chromelocks had ever seen. In the playroom were three main tracks. Close to the door was a small H.O. scale layout which seemed to be the Riverside course in absolute scale even to the lack of entrances and exits on to main highways. The second layout covered perhaps 500 square feet and was a beautiful copy of the Nurburgring course in Germany. Detail was perfect with tiny house, farm animals and Fokker Triplanes in the fields. Everything was there to make it probably the best 1/32 layout ever put together.



She pulled out a silver and black H.O. scale Porsche 917.

Chromelocks shook her pretty head in excitement. In the background was a huge 1/24 scale course, also full detailed, which absolutely duplicated the famed LeMans Course in miniature.

Chromelocks, eager to hook up, hurried back to the H.O. layout and went into her slot car box. After a moment of decision, she pulled out a silver and black H.O. scale modified Porsche 917 and her trusty controller. She plugged in, threw the toggle switch for lane 3, and in one professional motion, slotted the car and punched out in a whirl of tiny tires. Chromelocks' face immediately showed the concentration that made her a champion, as she hurtled the car around the course at a record-breaking speed. The tiny course, obviously never built for Chromelocks capabilities, began to break up. Large hunks of the track were being scattered about as the little car blasted through each corner under the girl's relentless thumb.

Chromelocks' expression had changed to anger, now, as the potholed race course no longer was fun. Abruptly, the girl simply stopped, picked up her car, controller and box, and walked toward the 1/32 course.

Chromelocks opened the box and pulled out an exquisitely detailed emerald green Lola T-162. After briefly checking gear alignment and the contact brushes, she walked to a driving station and plugged in her controller. Chromelocks' trained eyes scanned the course, quickly, memorizing each and every turn. She placed the Lola in the proper lane, flicked the toggle and fishtailed her car down the seven foot long straight. Her educated thumb eased only slightly as she blasted through the first turn (a 30 degree reverse camber) and up toward the esses. Her special rewind motor, which was turning at about 100,000 rpm, caused the secret gummy compound tires to burn deep grooves in the track surface. Chromelocks continued slamming her car expertly through the nine turns of the course and across the start/finish line.

The lap made, Chromelocks eased the car to a stop,

growing to herself, "Some challenge that was. . . an old lady could drive this course blindfolded! I think I'll see if the 1/24 scale track is more to my liking."

Once again the young girl put her equipment away. She carried her slot car box over to the drivers' side of the largest track and put it down. She bent over, opened the lid and took out a bright yellow Chapparral, complete with moveable wing. A quick examination and she was ready to race.

Papa Bear swung the door open and walked into his living room. He had gone but a few bear steps when his sensitive nose picked up a stange smell. Momma Bear and Baby Bear, who were right behind him, spoke in unison as they bumped into the backside of Papa. "What is that terrible odor?" they cried.

"I'm not sure," exclaimed the Big Bear, "but it smells like burning rubber!"

"Momma, you didn't leave the porridge on the stove, did you?"

"Certainly not," she exclaimed harshly, "you cleaned it all up, as usual."

The big bear's face frowned as his keen ears picked up the sound of brass gears whirling in the playroom. "Come on, gang, I think we've got us a prowler."

The bears walked into the playroom, which was now quiet and apparently deserted. Suddenly, Baby Bear cried out, "Looky! Somebody's been using my H.O. track and they used it all up!"

Mama Bear comforted her young cub and exclaimed "Cool it Maxwell, my track's even worse off than yours!"

Just then, Chromelocks popped up from her hiding place behind the big LeMans track. "I think I'd better introduce myself," she said somewhat awkwardly. "My name's Chromelocks and I can beat any slot racer around, be they man, woman, or beast!"

That's foolish human talk girly, and I'm just the 'Beat' that can prove it!" growled Papa Bear. "Get your best car



ready!"

The moment was at hand, as Papa Bear almost magically came up with a light blue Formula 1 Matra complete with wing.

Chromelocks, sensing that her Group 7 car wouldn't do it, plunged once again into her slot car box to retrieve a bright red Formula 1 Ferrari, rigged essentially like Papa Bear's Matra.

"O.K., Donelocks, or whatever your name is, you challenged me. But it's my track, so let's make it a three lap race. The winner gets the other guy's car and the loser pays for the damage to Baby Bear and Mama Bear's equipment."

"Whatever's right, Fuzzy," retorted the ever confident Chromelocks. "Just remember, the public thinks bears only eat honey, so don't get hostile after I cream ya!"

Papa Bear grinned a toothy grin and said, "No chance, girly, you're not exactly my kind of sweets."

"Baby Bear, you call the start," ordered Papa Bear.

The smallest bear moved closer, both to act as the starter and to get a better look at the action. Suddenly, Baby Bear screamed "GO!" at the top of his little voice, and the two cars streaked off toward turn one in a mixed blur of blue and red. Chromelocks managed a one-car length lead out of turn one and opened it another half through the esses. She held Papa Bear's Matra off through the fish hook sweeper leading onto the back straight. That lead was short-lived as Papa Bear's car, which was obviously geared precisely for the 95 foot straightaway, swept by Chromelocks' Ferrari like it was welded to the track. Papa Bear led now by 10 feet as he ripped through the big banked turn which terminated the straightaway. The young girl gritted her teeth and gained back three feet in the next two turns. After a panic-braking job in the last turn, Chromelocks

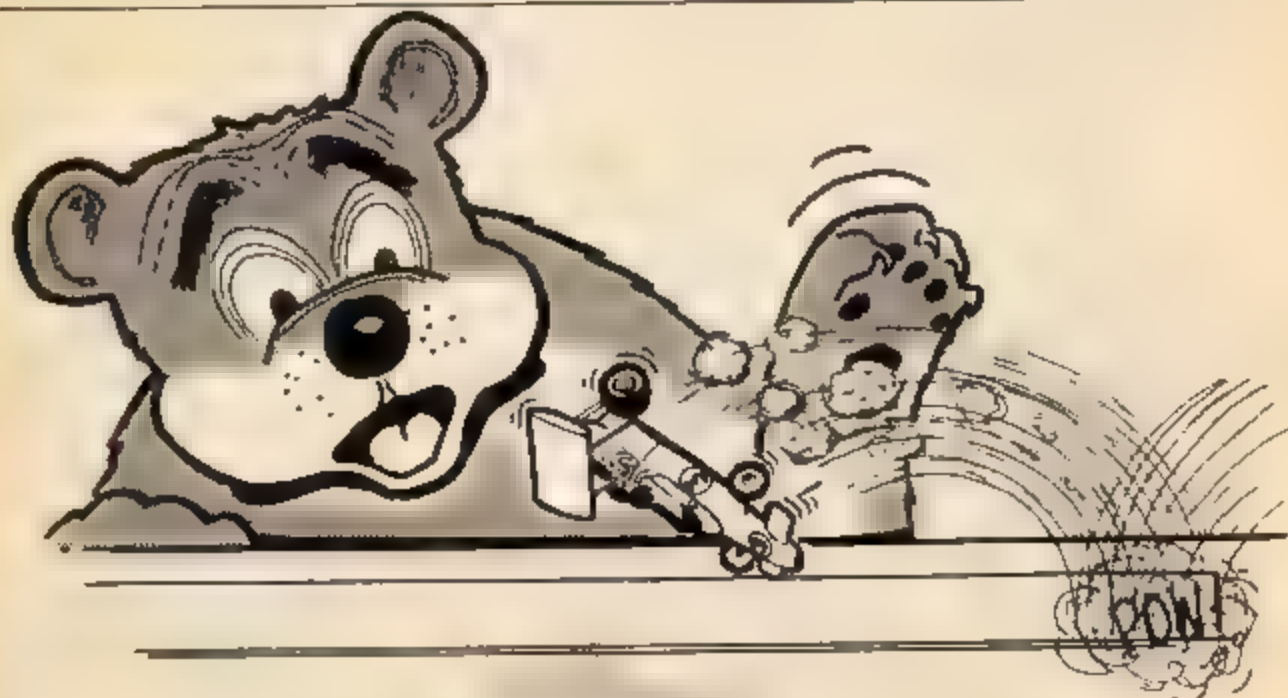
Ferrari trailed by a mere two feet. As the flashing cars slammed over the start/finish line, Mama and Baby Bear cheered and jumped up and down. Papa Bear, encouraged by his rooters, managed to hold Chromelocks off for one more circuit of the track.

As the cars entered the final lap, Chromelocks, in desperation, pressed as she never had before. In the esses Chromelocks' screaming Ferrari eased alongside the bear's Blue Matra. She knew he'd pull her car easily on the straight, but she was determined not to lose too much time on him this lap. Perhaps, she thought, by full throttling the banked turn that followed...it worked! After giving up four feet on the straight, Chromelocks had set step one of her race plan in motion, when at the end of the banking she had drawn even with the bear's car.

Through the next two turns the duo raced neck and neck. A broad grin cracked Chromelocks' face when upon entering the final turn she blipped her right thumb, sliding her car rear end out and into Papa Bear's Matra. The blue car leaped from its slot like a wounded gazelle, tumbling end over end across the finish line, microseconds after Chromelocks had won the race.

The Bears were stunned! But not Chromelocks. Moving quickly, she unhooked, picked up her car and equipment and hot-footed it out of a nearby open window. The bears rushed after her, but too late, she was already on her mini-bike and making for the gate.

Papa Bear, furious at the turn of events, glanced first at Mama Bear, then screamed at the retreating girl, "Come back anytime...my house against your mini-bike...ten laps, no rules!" But Chromelocks was, by then, far out of hearing range and glad of it. She'd had all she could "bear" that day.



The blue car tumble end over end.

SOLDER LIKE A PRO

IT'S EASY AND ABSOLUTELY VITAL IF YOU WANT TO FIELD A WINNER!

If you're an avid slot car racer, soldering should be more important to you than a good controller, a hot motor, or good tires. It's rough to have to drop out of a race simply because a solder joint didn't hold on the frame or lead wire. The advantages of a properly soldered joint are strength, better conductivity in lead wires, and better looks.

The equipment required for soldering is simple and relatively inexpensive. Soldering pencils (irons) can be had for less than \$3.00. An expensive gun, such as the dual-range Weller, is not necessary to do a satisfactory job, and in fact, some people find it to be slightly bulky for this type of work. X-Acto sells a combination soldering pencil

By "Breck" Price

and hot knife for a mere \$4.00 that works like a champ. Some of the other better soldering irons (gun or pencil type) are made by Ungar, American Electric Heater Co., and Hexacon Electric. In choosing your iron you should be sure the tip will allow you to heat the joint rapidly with a minimum of heat loss at the tip. For extensive work on large objects, a heavier tip is used, since the amount of heat stored at the tip is greater.

Both unplated and plated tips will produce good results if they are properly maintained. Unplated copper tips should be removed from the iron frequently for scale removal. To remove oxidation build-up (scale), the tip should be filed while cool. The file used should be a flat fine, single cut tooth-type, such as a jeweler's Swedish file. (X-Acto)

"Tin" the tip before using by applying solder to the working surface as soon as it reaches soldering temperature. Plated tips should be maintained by wiping the tip on a wet sponge and re-tinning as previously described. Discard the tip when it can no longer be tinned. Clean either tip by wiping on a wet sponge after each soldering operation. This will prevent a build-up of flux.

Flux is a honey-like liquid used to help clean the metals being soldered and promote the flow of solder. Flux fumes are toxic and should not be inhaled. Be sure your work area is well ventilated. The flux used should be a non-corrosive type, such as Sal-Met's.

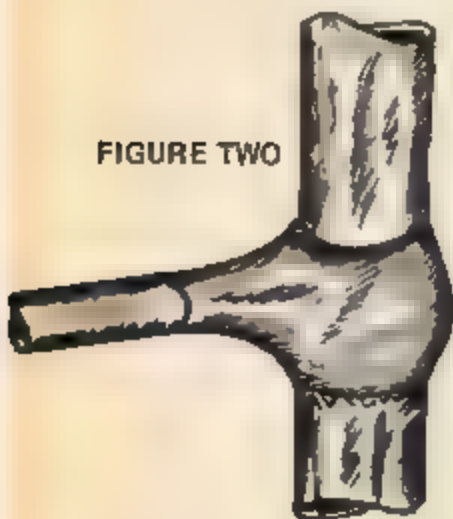
The types of commonly used solders are: tin alloy, lead-tin alloy, lead alloy, and silver alloy. The popular is a lead-tin alloy of 60% tin and 40% lead. Ersin's Multicore solder contains five cores of non-corrosive flux which makes it one of the most useful solders on the market. When aided by Sal-Met flux, it makes soldering a virtual snap.

Thoroughly clean the pieces to be joined with steel wool and denatured alcohol. Spread a minimal amount of flux on the surfaces to be joined. Apply heat at the intersection of

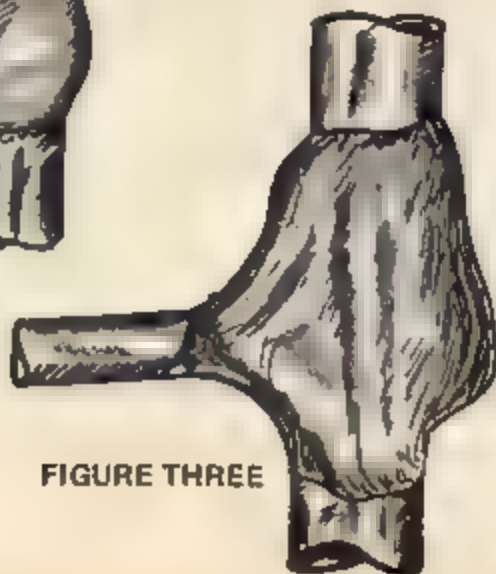
The soldering iron should touch both pieces of metal being joined while solder is being applied



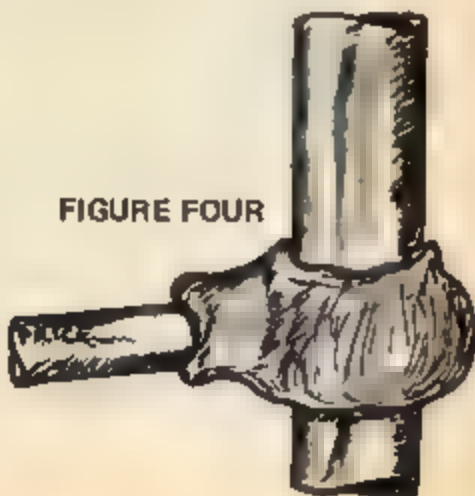
"T" connection with acceptable solder flow.



"T" connection with excessive solder.



"T" connection with "cold" solder joint.



"T" connection with disturbed solder.



FIGURE FIVE

the joint until the flux begins to bubble. See Figure One. Rosin core flux becomes active and removes oxides only when the metal has reached soldering temperature. Since the flow of solder is determined by its size, select one which will provide easy control for the amount required. I've found that size 18 S.W.G. .048" works best for me.

Feed small amounts of solder to the joint until a good fillet is achieved. See Figure Two. Do not apply more solder than is required to fill the joint. Too much solder results in a weak joint. See Figure Three. Avoid melting solder against the iron and flowing it onto a surface which hasn't been sufficiently heated. See Figure Four. When enough solder has flowed, remove the solder wire, leaving the iron in place. Keep the iron on the joint for a couple of seconds to boil out any flux or impurities.

Remove the iron with a wiping motion, taking care not to disturb the joint. See Figure Five. Allow the solder to cool completely before continuing. A typically good solder joint will be bright and smooth surfaced with solder feathering out to a thin edge from the main body of solder. The joint will also be free of pin holes, craters, cracks, fractures, spikes, excessive solder bulges and flux pockets. See Figure Six. If the joint is disturbed while cooling, it will appear dull grey and rough textured.

When soldering a ladder-type frame or space frame it

"T" connection with fracture, pinholes and craters.

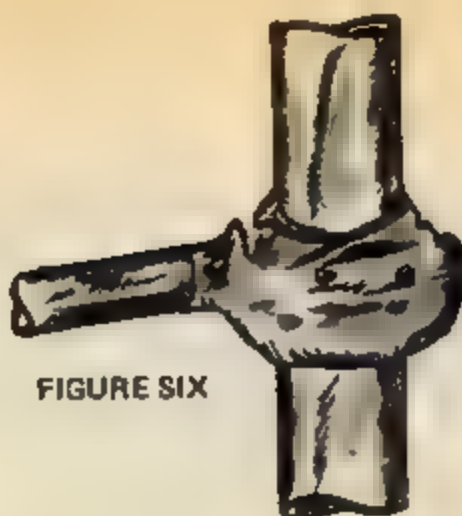


FIGURE SIX

becomes necessary to isolate the original soldered connections to keep from weakening them due to the additional heat. A "heat sink" is designed to radiate heat from unwanted areas and to keep the area cool enough to prevent solder from flowing or softening.

Place heat sinks between any existing joints and the working area as shown in Figure Seven and proceed to solder in the normal manner. An alligator clip can be used as a heat sink in an emergency. Heat sinks should be used when soldering lead wires to motors. Melted wire insulation, melted end-bells, weakened magnets, and shorted commutators are a few of the possible damages that can be caused by heat. Place one heat sink between the insulation and iron and one between the motor and iron.

Flux residue should be cleaned from the parts within four hours after soldering, since it will become more difficult to remove the longer it remains. Remove all residue by brushing the parts with a medium-stiff brush (an old tooth brush or the like) dipped in denatured alcohol.

Heat will oxidize brass and turn it a dullish brown color. If you wish to restore the original luster of the brass simply rub with steel wool and alcohol to remove the oxides and buff with rubbing compound and a soft rag.

Next issue, we'll discuss un-soldering techniques, wicking, and silver solder.

Always use heatsinks to isolate previously soldered connections from the heat of a new joint.

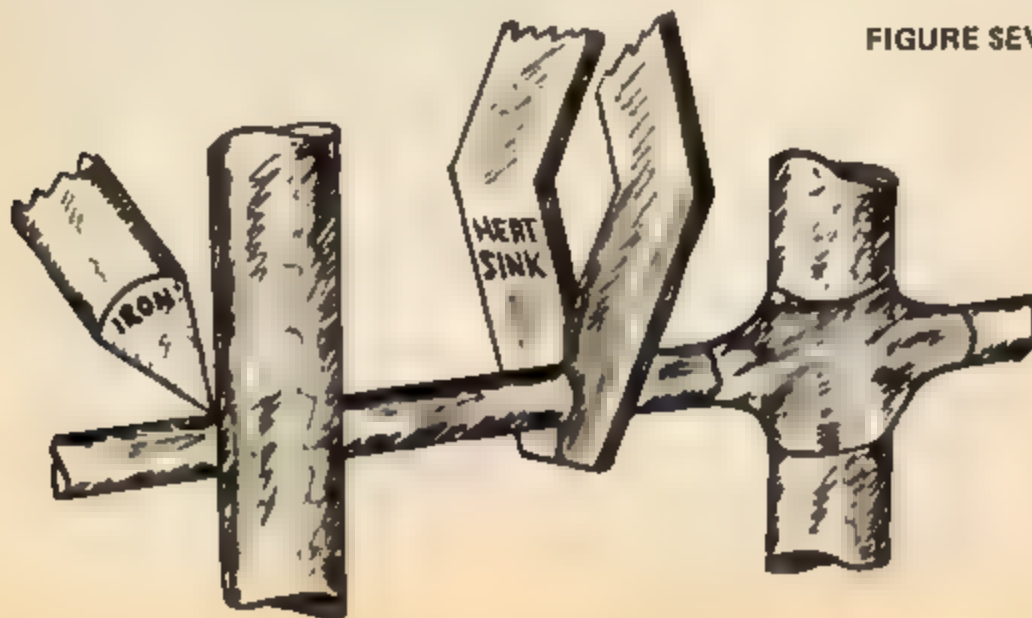


FIGURE SEVEN

A REAL DUNE GOODBYE TO THE N-SANDY REVELL'S "SUPER SAFARI"



The stylish Super Safari dune buggy is now available in a 1/25 scale kit from Revell. The shape and form of the actual car are faithfully reproduced but the really exciting aspect of the kit is its chassis and engine. Here, Revell has the beginnings of just about any dune buggy you'd want to make.

The chassis is stock VW shortened to the near-standard 80" dune buggy wheelbase. Stock VW front and rear suspension is included.

At the rear, the kit offers a choice of either VW or Corvair power. Both engine kits are fully detailed. The VW is equipped with dual downdraft Weber carburetors with intake bells, while the Corvair features dual downdraft Strombergs. The VW exhaust is the popular straight tube with a tiny glass pack muffler; the Corvair has straight unmuffled headers.

Front tires are approximately eight scale inches wide

with nearly twelve inch wide monsters at the rear. All four wheels are chrome EMPI's.

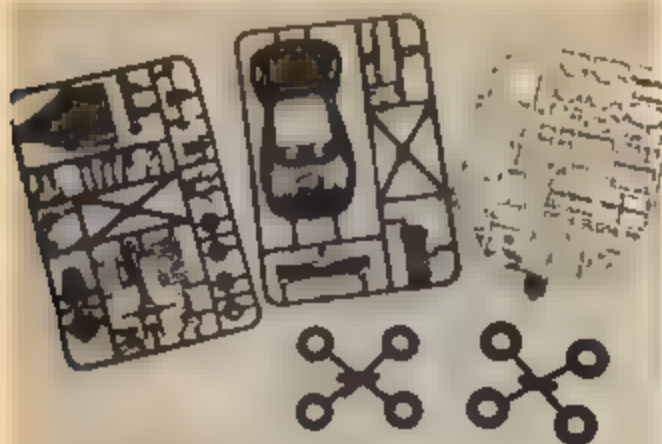
With the basic chassis (even without any body) you can build just about any type of popular dune-racer you'd wish. It's a shame to cover up such a well-detailed chassis with any body, no matter how pretty it may be.

The Corvair engine is another item we'd hate to hide with a body — we'd even go so far as to recommend leaving off the cooling shroud from the Corvair so those nice fins and details will be visible. A complex-appearing engine like this Corvair seems to need the extra confusion of ignition wiring, hoses, etc., to really look its best.

The photos show you the basic detail ideas. You could go a bit farther yet and add an ignition coil, the carburetor linkage and choke cables or levers. A set of flared aluminum tube velocity stacks atop each carburetor would be a bit better than those aircleaners, on a show car at least.

By Robert Schieffler

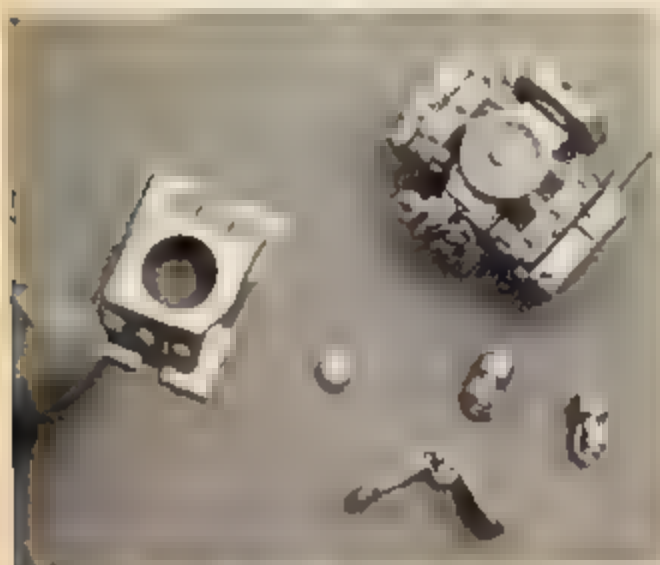
For off-the-road racing the Super Safari doffs its windshield; driver and mechanic hop in to fly through the boondocks.



Revell Super Safari kit includes a fully detailed 80" wheelbase VW chassis, wide tires, a choice of VE or Corvair engines, and a fantastically styled Super Safari body.



Both VW and Corvair engine parts are chromed in kit. Corvair, at least, looks a bit better if parts are painted silver.



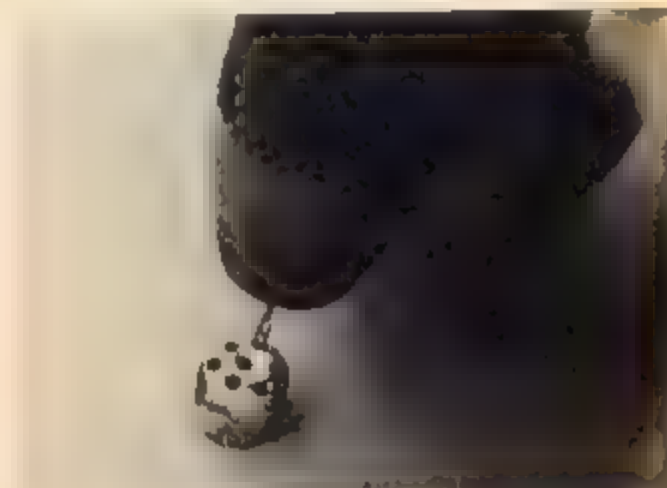
Assemble Corvair engine less air shroud, carburetors, distributor, and pulley/drive belt unit for fan drive.



Brush water proof black ink into the hollow between the cylinder fins and fan blades to accent their depth.

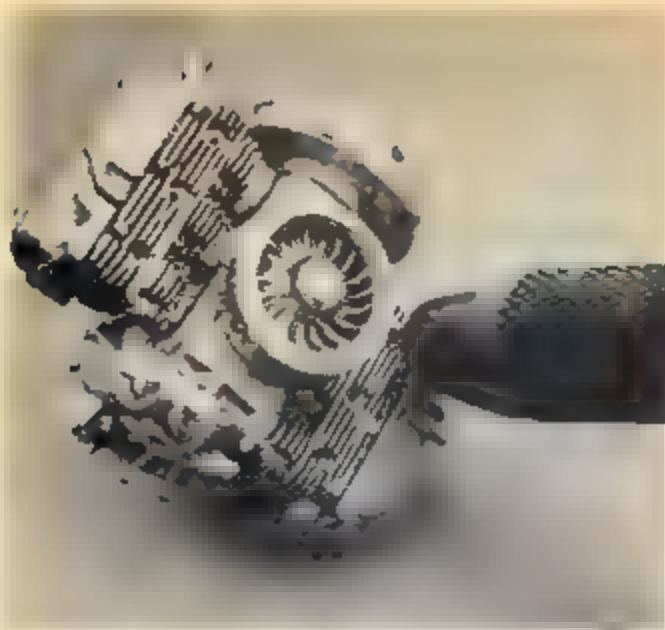


Ten pounds test nylon fishing line, a No. 84 drill bit, and a pin vise to hold drill bit are needed to add wires and lines to engine.

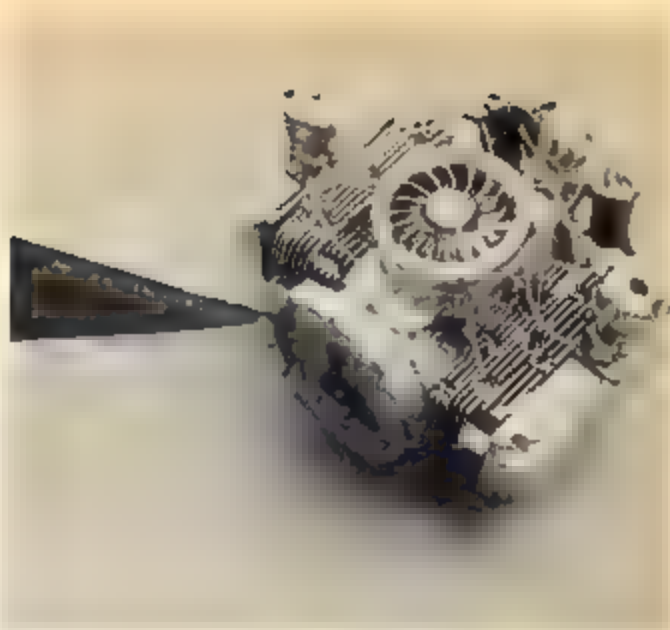


Drill six equally-spaced holes near top edge of distributor cap and single hole in center with No. 64 drill in pin vise.

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Flat cavities on tops of cylinders are locations of spark plugs. Drill a No. 64 hole in the center of each cavity



Bell housing adaptor is part of Corvair engine in Super Safari kit. Piece adapts Corvair to VW transaxle like full-size item.



Oil filter body is painted red, distributor cap black. Exhaust pipes face toward distributor end of Corvair engine.

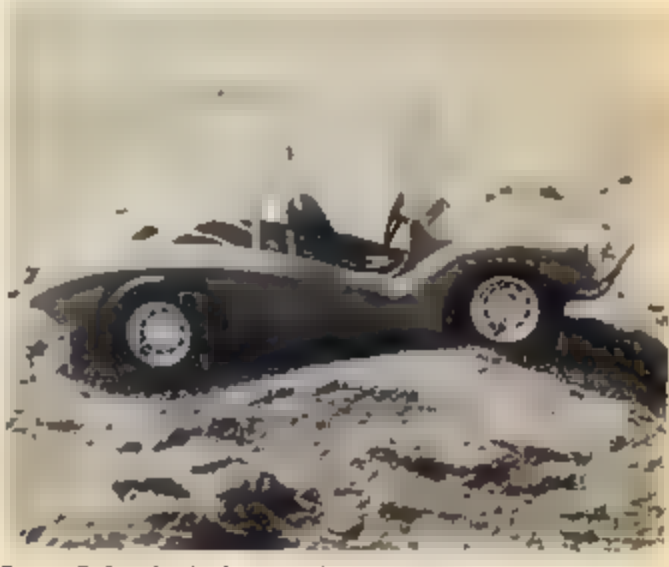


Fan drive belt/pulley piece completes Corvair engine. Cooling shroud was left off. Either VW or Corvair fits chassis.



Completed 80" VW chassis, with high flotation dune buggy tires and bucket seats is a model in itself.

34/Model Car Science



Super Safari body is one of the prettiest yet for the 80" wheelbase VW chassis. Car has "cokebottle" shape made famous on early Chaparral road racers.

DICK LOEHR'S NEWEST FUNNY CAR IS QUICK, FAST AND
TOUGH ON THE OPPOSITION. IT'S SUITABLY NICKNAMED . . .

STAMPEDE!



Indications of tremendous things to come were seen on early runs like this one, netting ET's around 7.86.

By Ed O'Brien

To city folk, a Mustang means a sporty compact car and something seen nearly every day. On the other hand, to someone familiar with horses or perhaps a TV western fan) a Mustang is also a horse. Dick Loehr knew about the horses, and it was in 1965 that he began drag racing in earnest. His choice of mounts was a Mustang, and his choice of names for the new venture was quite natural: Stampede. Since that time Dick has progressed greatly, growing with and often ahead of the funny car field in which he competes. His record, not only in the midwestern part of the country where he lives, but nationwide attests to his wise selection of a car name. He usually manages to stam-pede the 1500 hp in his car right into the victory circle.

Dick has never been one to follow trends, and his cars have usually been considerably different from those of his contemporaries. His 1969 Mach 1 is no different. The most radical difference between his and most other funny cars is the chassis. It's a com-

pletely unique design and the first of its kind. This chassis, the Chapman Hydra Slide, resulted from the testing, design concepts and safety standards of Loehr, John Skiba and Dave Arlasky. Skiba is the capable mechanic who handles virtually every maintenance task on the engine, transmission and chassis. Arlasky, a veteran of many years in racing, heads up the chassis shop at Chapman Automotive in Chicago, Ill.

Features of the newly designed chrome moly frame include a narrow roll cage, unlike the very wide designs that have become so common. The designers felt this would afford more protection and create fewer stress points in case of accident. Also, the chassis was designed so the engine could be moved forward or backward easily by sliding it on the chassis frame rails. A hydraulic cylinder is also to be hooked up on the car so the engine can be moved even between burnouts. The driveshaft is splined so it will fit with the different engine locations. Wheelbase on Dick's latest Mustang is

25 inches.

Unlike in the past when he ran the old standard early Chrysler hemi, Dick has gone fully Ford this year. He's got the full support of the factory behind him, and Ford's champion, Mickey Thompson, has taken a shine to this popular and successful veteran from Kalamazoo, Mich. Currently his power is being supplied by a SOHC 427-cubic-inch blown fuel burner. This will later be replaced by the new 429 "Shotgun" motor.

Preparation of the engine is John Skiba's responsibility, and he handles it superbly. Retaining the stock cubic inch displacement, John reworked the heads, porting and polishing them. He then applied his touch to the valves and installed a pair of Isky 650 cams to activate the valve train. The pistons, rods and rings used are all Mickey Thompson Equipment, producing a 6.5-to-1 compression ratio in the cylinders. Fuel is handled by Hilborn four-port injectors, with a wind boost provided by a 6.71 GMC blower, belt driven at about 25 per cent overdrive.

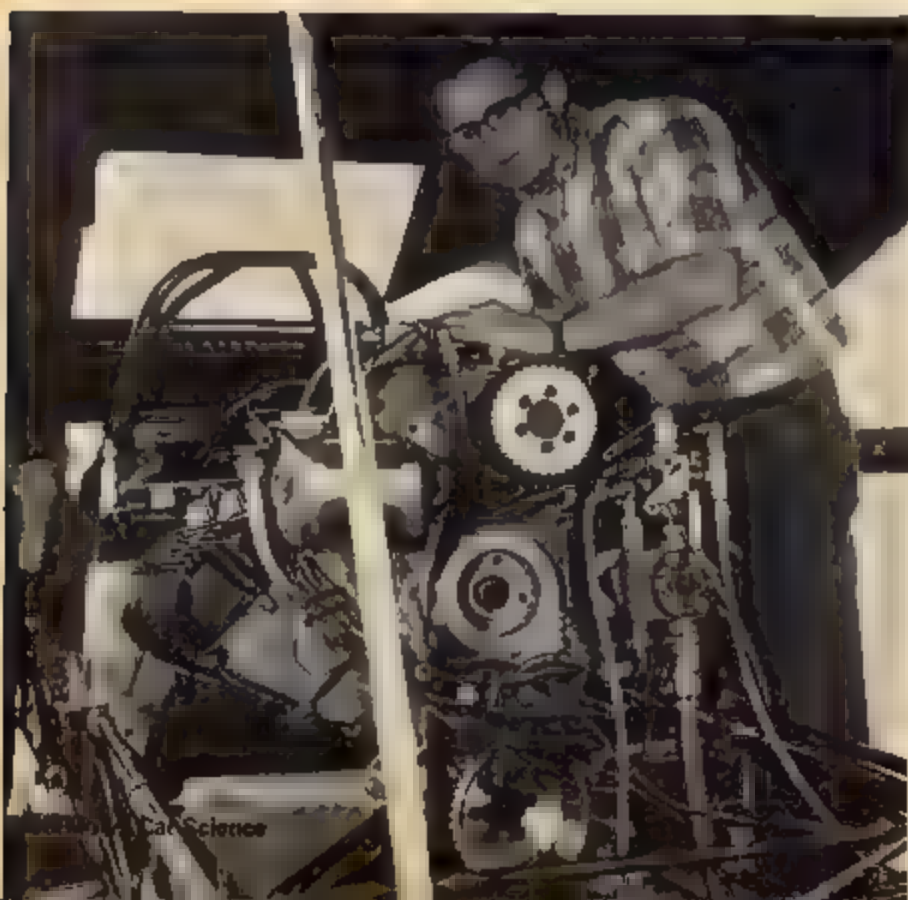
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Clean driver area is equipped with a lightweight shifter, a brake pedal and a Hydra Link hydraulic throttle. In front of the engine (on chassis rail) is the starter plug in.



Detailing on the car included unique striping and small horseshoes imbedded in the gold leaf name "Stampede."



Possibly Loehr's greatest asset, his mechanic John Skiba, checks his charge, the blown fuel-burning Ford. Note the holes in the M/T blower drive to reduce weight.

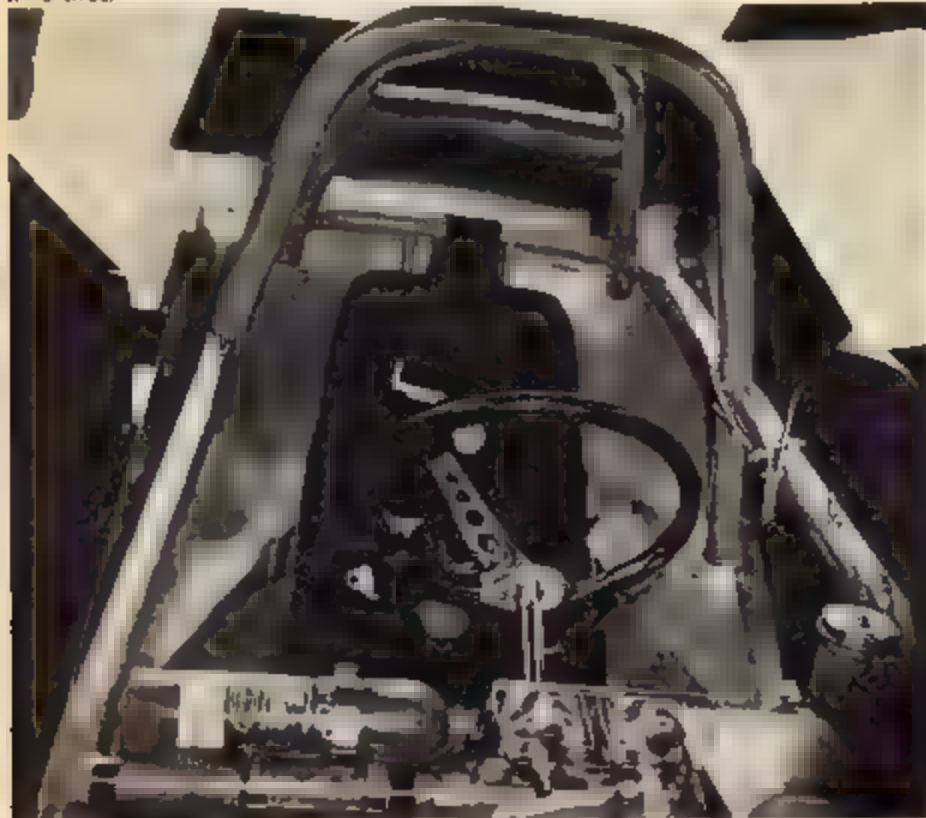
Providing fire to ignite the 68 per cent nitro fuel vapors is one of Mallory's Super Mags and a set of Autolite plugs. Exhaust headers were designed for the car by Junior.

Since cooling isn't a major problem with the overhead cam engine, Loehr doesn't carry a lot of water. Actually, a small one gallon tank is mounted in front of the engine and this, together with the water in the block, is sufficient. To further aid in keeping things cool, a deep Mlodon oil pan was installed with a capacity of eight quarts. Mlodon's special oil pump and pickup is also used.

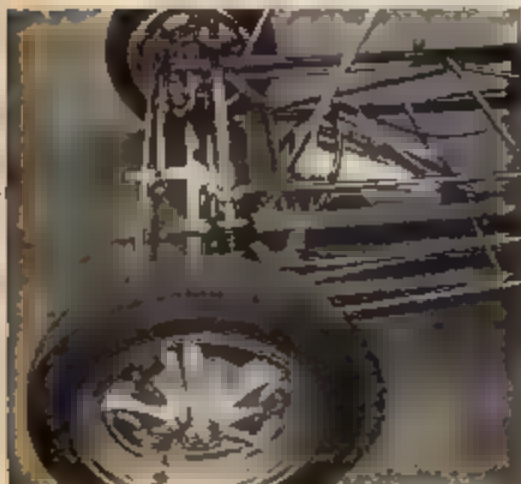
Looking over Loehr's car, his safety-conscious attitude becomes very obvious. Mounted on a chassis support



Chrome is everywhere on this new Mach 1. Dual Chapman shocks with coil springs support the rear end. The gears are 3.86-to-1, and those are M & H 13.00 x 5 tires.



Safety conscious Dick Loehr helped design this snug roll cage, and that fire extinguisher is mounted within easy reach.



The clean front end treatment was conceived by Dave Arlasky, head chassis man at Chapman Automotive. All chassis components that could be removed were chromed.



Another unique feature of the Chapman Hydra Slide chassis is this full floating rear axle housing.

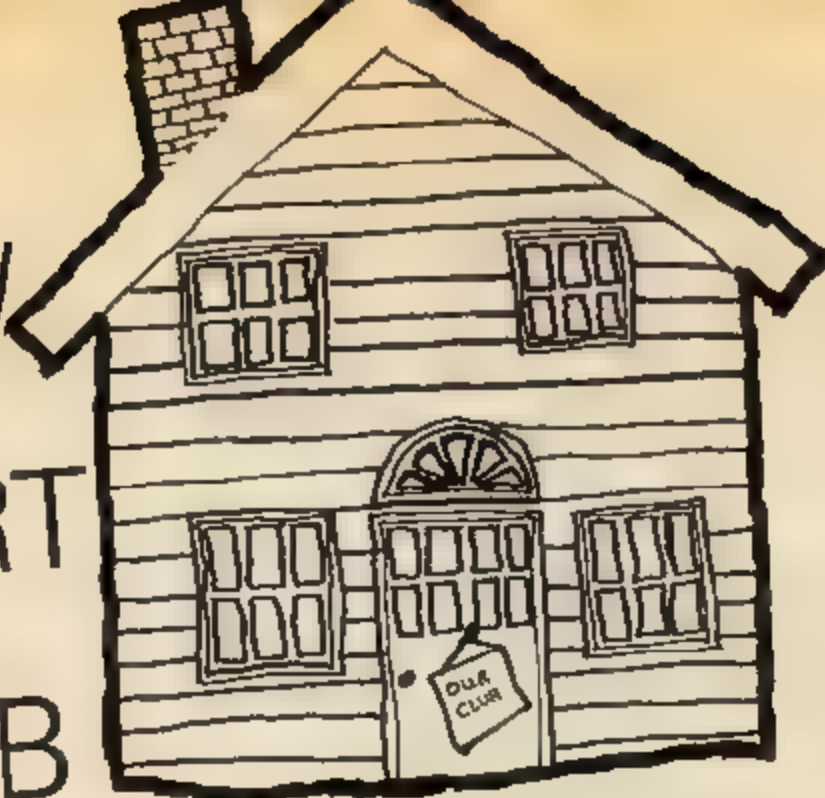
directly in front of him is a fire extinguisher. He also utilizes a full transmission blanket, five-way safety harness and a pair of Wagon Wheel parachutes, all from Chate Metal Co. To hold the car on the starting line, and to stop when necessary, a set of Airheart disc brakes were installed, activated by a Gurling master cylinder. To give him warning of engine problems and possible danger, Dick installed oil pressure and water temperature gauges. These things are the obvious safety features but one not so easy to see is the interior aluminum work itself. This sheet metal, formed by Chapman Automotive completely seals the driver's area from the engine and any possible fire.

The drive train on this car, following in line with the rest of Loehr's latest venture, is unique. The C-6 transmission is built and maintained by Skiba. Behind this is the splined driveshaft. The spline is 14 inches long, to accommodate a move of up to 10 inches in engine location. The rear end, basically a heavy duty Ford unit, features full floating axles designed by Chapman. The full floating effect, used on many cars and sports cars, practically eliminates loss of axles because it puts the weight support job on the housing and leaves the axles for driving alone. To make sure the car would never lose a big one to a broken axle, Chapman installed a set of their super axles. Rear end gears are 3.89-to-1.

Dick Loehr's latest funny is by far his finest from an appearance standpoint. The immaculate Mach 1 body, a product of Fiberglass Ltd., was lengthened and had the top chopped two inches. It was prepared and painted by Jerry Abrams and is a radical departure for a racer who has stuck with near stock colors. This one's pearl white and pearl orange, with meticulous detailing. Dexter's signs handled the lettering, using a lot of gold leaf and an attractive assortment of colors. Everything that could be removed from the chassis was chromed, and the chassis is finished in the same orange as is on the car's body. M/T wheels are used all around, with narrow four-inch tires up front and 13.00 x 15 M & H tires in the rear fender wells. Keeping up the car's appearance and aiding Dick and John with the tasks involved during a year of touring is Bob Mandl.

With four years of funny car experience, a very talented mechanic, factory help and an uncanny ability, Dick Loehr will be tough to match in 1969. Also, promotion is a big part of the job when you're a touring pro, and this talented racer is one of the sport's leaders in this respect. With his race car he supports a wife and two children, so he realizes that all his ability, experience and the knowledge gained during four years in college must be devoted to his work. By the end of the summer he expects low seven-second runs, nearing 210 mph. If he does it, he'll be nearly impossible to beat.

HOW TO START A CLUB



AND KEEP IT GOING, TOO!

There's no getting around it! Racing alone is an out-and-out drag, man! Who wants to go out to his track (or down to your track if you're a Midwesterner), turn the power on, and then spend the next few hours whizzing around an empty layout all by yourself?

Not me! Of course, never have that problem because I belong to a very active club. But I know many of you fellows aren't that lucky. That being the case, I've got a few pointers for you that should help you get a club started —

and keep it going.

What's the first thing you need? People, of course. Where do you find people? Well, almost anywhere. Look around, there are millions of them!

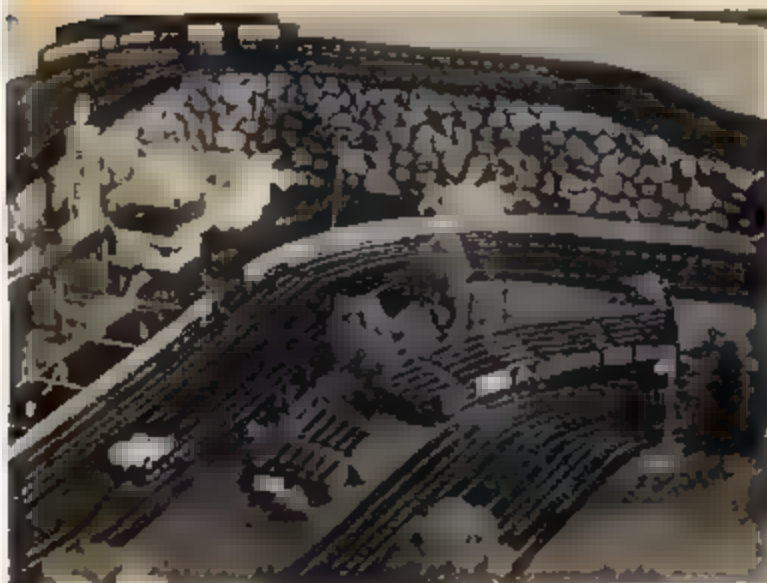
Sure, you say, but most of them aren't slot racing enthusiasts, so that rules out a lot of them right away. True, true. Well, simply go where the slot racing enthusiasts are. If you don't have a slot racing shop in your town, you no doubt do have a hobby shop, at least. Whip up a little sign with crayons and cardboard, trundle on down to your hobby shop with it and ask the owner if you can display it somewhere where his customers will see it. He'll no doubt give you the okay. After all, a club means that a lot of his customers will be buying their parts from him, right?

The sign should simply state your name and address (and phone number) and your desire to start a slot racing club. I might add that you static model builders can use this same technique to locate other static model builders interested in starting a club.

Pretty soon you should start getting phone calls, or have visitors dropping by your place. It only takes a half-dozen people to start a good club, so you should be able to get the ball rolling almost instantly.

What then? Determine a good time for all of you to get together. Arrange a meeting at a convenient spot. When the meeting starts, simply state your aims (after all, you're the one who put the sign up) and find out your new friends' attitude toward a club. Take a vote on how many times to meet each week, or month, and elect officers.

You'll need a president, whose job is to conduct the meetings, a vice-president, whose job is to carry on in the event the president can't make a meeting; and a secretary-treasurer, whose job is to take care of the club's money and keep race dates and other records straight. After you've elected the officers, determine a name for your club.



You can race on small tracks, such as this plastic, snap-together layout, or...

The previous procedures are the easiest part of setting up a club. After you've taken care of all of that, you must consider the most important point — where to race.

Now most of you fellows have home tracks of some nature. No matter what scale you are interested in — 1/32, 1/24, or HO — you'll probably find out that you have a mountain of track available when you put all your assets together. If the track brands are the same, you're really in business. Say you and one of the other fellows have Revell layouts. No problem there; just stick them together for a nice, big outfit. If there are different brands, check Auto World's catalog (they advertise their catalog in this magazine all the time; look for it) for an adapter that allows different brands of track to be connected together. Buy as many adapters as you need out of the club's treasure. It's money well spent.

After you've got the track problem whipped, find a suitable location to race where you'll be out of the way. After all, a half dozen or more fellows yelling and screaming in a woman's living room is enough to shut down any club!

A basement is ideal. If you're a Westerner, you probably won't have a basement, but you'll no doubt have a garage or a patio. Set the track up where it's the most convenient for everyone concerned. Since most of you will use snap-together track, be certain to clean the area up spotlessly after you're finished racing. You'll be more welcome back if you do, out of business if you don't.

If you've never heard of NAMRA (North American Miniature Racing Association), I recommend that you read their pitch (which I've included in this article and sign up immediately. That's a piddling amount of money for what you get, believe me. You get a special subscription offer to MCS (for NAMRA members only), a chance to race in any NAMRA sanctioned event, *official club score sheets, enough for one year's racing program* (worth the \$1.00 membership fee, alone), NAMRA club stickers, a NAMRA rule book that will tell you everything you need to know about rules and regulations for running a successful club, and current racing car specifications.

HOW TO KEEP YOUR CLUB GOING

It's one thing to start a club; it's another thing to keep it going. If your club does a lot of racing, you'll find enthusiasm high. Nothing gets old quicker than sitting around talking about racing. Race! And race often.

Stick to the rules. If your club has rules (and we hope you'll use NAMRA rules religiously) you'll find that everyone will have a lot more fun than if you "run what you bring." The racing is more even, and that means keener competition. And keener competition means more excitement, which is what racing is all about.

Keep the cost down as much as possible. When racing costs go out of sight, people have a tendency to lose interest. You don't need expensive equipment for home track racing. Most of the time, rewind motors are completely unnecessary for a short, twisty track. In fact, a stock motor often has an advantage. And everybody knows rewind motors are the most expensive item in slot racing. Believe me, if everyone is running a stock machine perfectly tuned, the racing will be thrilling, to say the least.

That's it for now. We'll be running more on club racing in future issues. Watch for it.



Go to a custom-routed slot track such as this beauty. Either way, racing is more fun if you have a group of enthusiastic fellows who think the way you do. That's called a club, friends, and club racing is WILD!

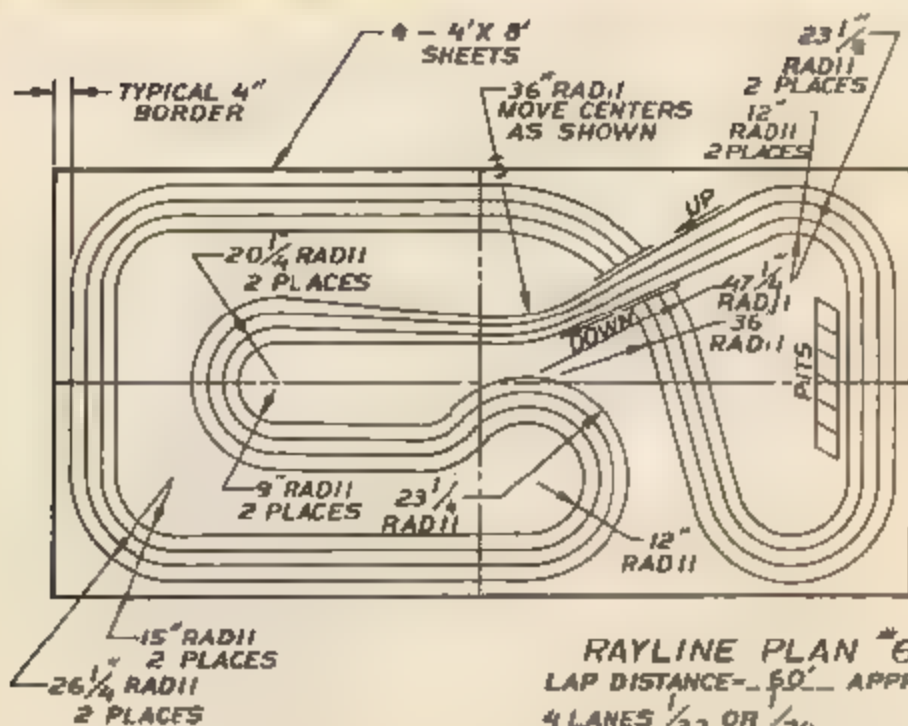


The competition gets fierce in club racing, which will make a "hot thumb" out of you mighty fast if you want to get in that winner's circle from time to time.



THE ART of track building

THE RAYLINE PORTFOLIO OF TRACK DESIGNS



RAYLINE PLAN #6
LAP DISTANCE - 50' - APPROX
4 LANES $\frac{1}{32}$ OR $\frac{1}{24}$
OVERPASS ELEVATION, 6" MIN
SCALE OF DRAWING $\frac{1}{2}$ " = 1 FT

You can purchase plans and a "how to" book on custom slot tracks by sending \$2.00 (plus 50 cents handling) to: Rayline Slot Racing Company, PO Box 1738, Thousand Oaks, California 91380. You'll get a dozen scale plans (one of which is shown here, but not to scale) and a track wiring diagram, plus a complete "how to" book on the actual track and table construction. Ask for "The Art of Track Building."

40/Model Car Science



THE NEW NAMRA FORMULA

- **NAMRA introduces a new and complete Home-Club racing program for just \$1 a year.**

You will receive in your new NAMRA Formula package:

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Membership is available to any home-club racer or group. Just fill in the coupon and mail with attached sheet containing names of club members. Include check or money order with one dollar per member to cover cost of one year's membership.

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HERE'S WHAT'S NEW ON THE SLOT SCENE

MANUFACTURER'S PREVIEW

In the June issue, we started a regular feature — a manufacturer's preview. This month we'll look at some new products from an old familiar firm — Dynamic Models.

Your dealer can probably supply you with these new items. If not, you can order directly from Dynamic Models, Dept. MCS, 13309 Saticoy, North Hollywood, California 91605.

NEXT MONTH Associated Manufacturing.

Three new bodies in both popular weights. On the left is the Gulf Mirage. In the middle, the McLaren M6 G.T. On the right, the Porsche 908 Spyder. Catalog numbers 1528-1529-1530, just \$1.59 each.



Orange and blue tires, 7/8" x 11/16" + .020" diameter on lightweight wheels. Space-Age tolerances used here and they're priced at \$1.25 per pair. Catalog number 666 (blue); Number 667 (orange).





Firm rubber front tires moulded onto superlight wheels, guaranteed concentric — \$1.25 per pair, catalog number 694.



From "Hi" Johnson's drawing board — a new concept in drop arms complete with built in flag stops and plunger mount slots. Puts the weight where it's effective. Just 98 cents each, Catalog number 551 (kit) — 88 cents; catalog number 552 (assembled) — \$1.49.



The first (and only) sidewinder ready-to-run under \$10.00, complete with lightweight painted body, 16-D motor, super-sponge tires, aluminum anglewinder gear and moulded front tires. All cars are factory "run in" before shipment. Catalog number 951 (Ford MK IV), number 952 (McLaren M8A) — \$9.95 each.



You already know about the aluminum spur gear. Now there's a custom cut pinion for a guaranteed perfect mesh. Spurs in all sizes — \$1.10 each. Pinion numbers 806, 807 and 808 — 39 cents each.



Do motor boxes give you fits? These are already assembled, both left and right hand drive and fully braced — \$1.98 each, Catalog number 349 (r.h.); 350 (l.h.).



If you've got more time (or less money) you can buy the motor box kit and do it yourself. Only \$1.29 each, catalog number 348.

MPC'S "SKI-DOO" SNOWMOBILE IS SOMETHING ELSE AGAIN
IN BIG 1/12 SCALE!

SPEED IN THE SNOW

If compared to the "bare bones" look of a motorcycle or most dune racers, the sleek and nearly wheel-less snowmobile just doesn't seem to be in the same league. Yet all two-wheeled, four-wheeled, and wheel-less vehicles are very much off-the-road fun machines.

The snowmobile has the unique distinction of being the only one of these that can be enjoyed in both dirt and deep snow — its only major disadvantage is its unique impracticability for street travel.

Snowmobiles give the motor sports enthusiasts in the major part of America the chance to "motor" about the hills and dales of the countryside when the multi-foot deep snow keeps most fold indoors bench racing. Snowmobile drivers can travel over almost any type of snow-covered terrain at speeds similar to the fair weather "trail" motorcycles. The snowmobiles will climb up and down hills and over about the same type of obstacles that a motorcycle or dune buggy will. It steers with about the same accuracy as a motorboat as its ability to "float" on the snow would suggest.

The design concept that makes the snowmobile perform where other vehicles cannot is one of engineering in the maximum amount of "floatation." Dune buggy builders try for much the same effect with their ultra-wide low pressure tires. The basic idea is simply to have as much area of contact with the surface of the ground (or the snow) as is possible, coupled with the lightest vehicle weight. The less the amount of weight per square foot of "tread" contact, the less the vehicle will tend to sink into the surface. The snowmobile has about five to twenty times the amount of tread contact area that the average dune buggy has, with only a fourth the weight!

The power is supplied by either a motorcycle or industrial air cooled engine, depending on the brand of snowmobile. The overall weight of a snowmobile is generally about twice that of a motorcycle of equal engine capacity. If you've never driven a snowmobile, try to imagine the speed and jumping (yes, they do fly over the brows of hills) of a motorcycle, the sit down driving position of a car, with a bit of the thrill of downhill skiing thrown in just for fun!

44/Model Car Science

The first-ever model of a snowmobile is now on your dealer's shelf. MPC picked the largest selling full-size vehicle, the Ski-Doo, and reduced it to a whopping big 1/12 scale for this model kit. The large scale enabled MPC to include features like a fully-detailed engine, rubber-like snow tracks and seats, and steering that actually works through the handlebars.

We found that the kit assembles with ease, but that the installation of the steering could present a bit of a problem. The kit instructions cover assembly of all other parts most thoroughly. If you follow our pics and caption hints on mounting the steering pieces you'll have no problems there either.

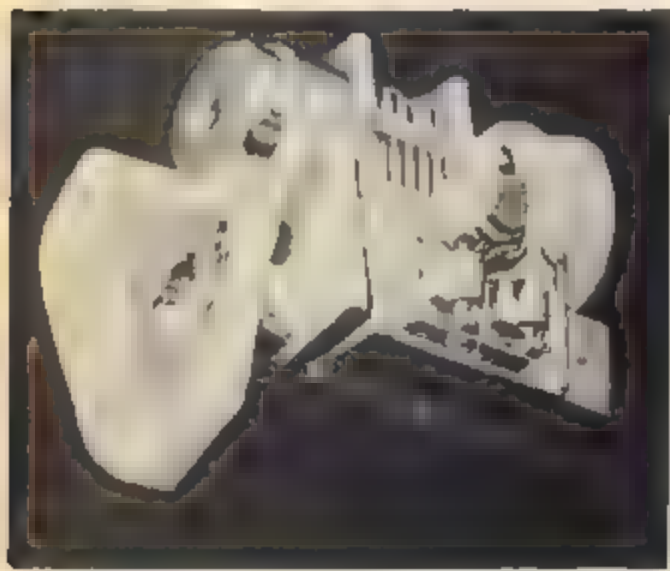
A few of the snowmobile makers and some accessory firms have recently introduced a front wheels and tire kit for the full-size vehicles. The tires expand the use of the snowmobile to sandy terrain where the tires offer better turn control and wear than the standard front skis. Conversion of the MPC 1/12 scale Ski-Doo would be a simple matter of adapting the wheels and tires from MPC's "Kyote" dune buggy to the pivot points on the front skis. You might even consider converting the Ski-Doo into a long drag racing snowmobile of the type ex-go-kart racer Mickey Rupp and other are building!



MPC's Ski-Doo kit in 1/12 scale is the first-ever model of a snowmobile. Soft rubber-like seats, treads, engine belt and hand grips are included.



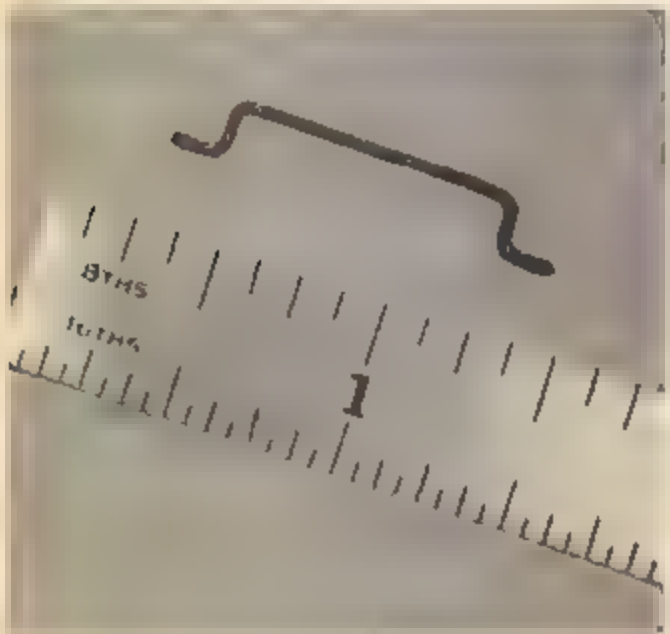
By Robert Schlicher



Ski-Doo engine is a 1/12 scale model of full-scale vehicle's Rotax industrial air-cooled powerhouse. Modeler can add gas lines and ignition wires.



Steering column is held inside dashboard by a half-circle of yellow plastic. Note small round tip at end of shaft. This tip MUST be left on shaft when shaft is removed from "tree." Tip is lower pivot.



Wire steering arms are included in kit but are easy to lose. A paperclip bent to this shape will do. One arm is needed for each side.



Fit steering arm wire into levers at tops of this BEFORE gluing levers on. Then fit wire into center steering pivot crank, and glue levers to tops of skis. Dry overnight.



Gas tank and carburetor access hatches can be highlighted by painting in lines with waterproof black ink. Air intake grills on top and sides of hood can also be "opened" by coat of black ink.



Front skis steer by turning handlebars on model just as they do on the full-size Ski-Doo. To maintain a true radius thru turn, inner ski pivots more than outer.



Huge track is real secret of the snowmobile's ability to "float" over snow. Machine weighs little more than a large displacement motorcycle.



What else would you call the Ski-Doo's people-carrying trailer but a "Ski-Boose?" Full-size vehicle has ample power to carry two and pull two passengers cross-country



Snowmobiles are used for rescue and exploration purposes as well as for sport and racing. MPC kit includes decals for all these uses. Accurate handrails for lifting and/or pushing machine through really rough terrain are also part of 1/12 scale Ski-Doo.

We'd like to know what you like (or don't like) about *Model Car Science*. You can help us determine which articles we should place in future issues of MCS simply by checking the appropriate boxes below, and mailing this coupon back to us.

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WHO IS YOUR FAVORITE STATIC MODEL BUILDER

YOUR AGE PLEASE

Thank you! You can check more than one box, so vote as many times as you want. (If you don't like one of the features (or writers, etc.) don't check that box. We promise to analyze this reply carefully and use it to guide us in selecting future articles.

Clip this page and mail to:

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TELL US ONE!



IT'S RUGGED AND MIGHTY QUICK!

RIGGENS' ANGLEWINDER

Riggins Manufacturing Company, located in Torrance, California, keeps turning out items for serious racers that just tickle them pink. The latest is this fine 1995 1/2" scale ready-to-run Porsche 908. The heavy brass chassis is set up in anglewinder form. At first glance it appears as if this thing should flat fly - and it delivers the performance to back up its promising look.

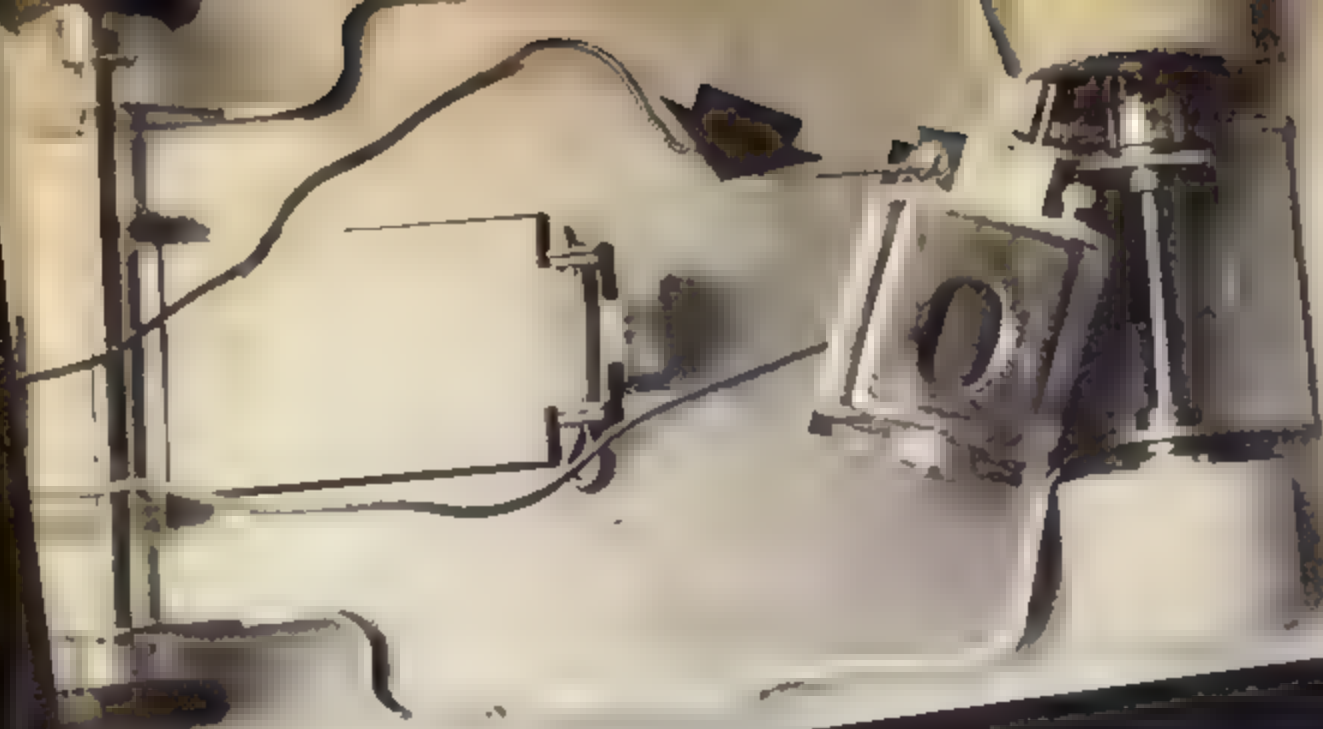
Handling is absolutely superb once the car is broken in. The 25-D puts out enough boost to make lap times interesting. And when you feel that you are ready to go faster, you can always hop the motor up. The chassis will easily make much more horsepower.

The regular weight, clear plastic body is nicely painted. With a bit of hand detailing the car looks still better, and we recommend that you do so.

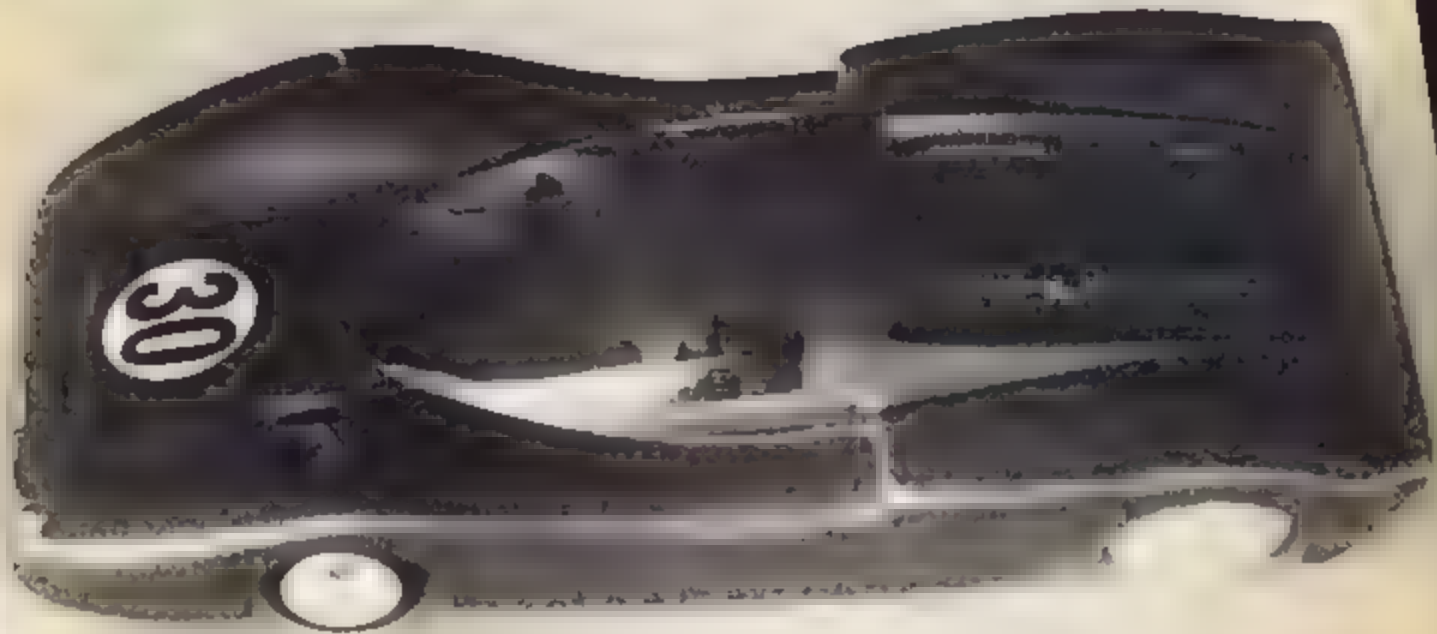
Riggins has a lot of new items worth seeing. Drop them a line, ask for a catalog. Their address is Riggins Manufacturing Company, Dept. MCS, 21919 Avalon Blvd., Torrance, California 90502.

The chassis of Riggins' new ready-to-run anglewinder is simple, rugged and effective. All wheels are set-screw, and the space-age plastic 35 tooth anglewinder gear. With the 20 tooth pinion, it offers 3.5:1 ratio. Orange 11/16" wide 5/7" gear teeth offer plenty of grip.





The simple indentation in the center of the brass pan-chamix provides the down-stop for the 1" wide brass drop arm. That's a Cox quick-change shoe on front. Rear axle rides in oilite bearings. Front axle is bearingless, like the traditional "Cokras Stop" axle display built in. Front tires are hard rubber, narrow, 1/16" in diameter.



The Porsche 908, 1/14 scale ready-to-run sells for \$9.95, complete with 24-D motor. It's an excellent buy indeed.
August 1966/46

TEEN SUPERBUILDERS

The three 1/25 scale funny cars on this month's cover are the work of two Southern California teens, Carl Hanes and Charlie Woodard. Carl is 14 and Charlie 15 years old. Their work has the look of builders with far more years of experience than either could have.

The cars were entries in a local model car contest sponsored by Jack's Hobbycrafts of Whittier, California. What sets these particular cars apart from run-of-the-mill models is their completeness of detail. All three have original and very nicely done paint

THE WORK OF THESE TWO TEENS RIVALS THE BEST WE'VE SEEN FROM ANY ADULT BUILDER.

schemes with LetraSet dry transfer lettering and decorative markings. All three have more than stock kit configurations with chassis and engine fully wired and equipped with fuel lines. The two Chargers combine parts from two or more different kits for maximum realism.

Static model builders, of any age, can benefit from the ideas these two have used. Note, for example, how

much the realism of the chassis and engine are improved by the plethora of wiring and lines. You'll have to search out an artists' or drafting supply store to find the unique LetraSet dry transfer letters and filigree markings these two guys used. The search for such unusual detail bits is but one of the things that can set your model apart from the also-rans in any model contest. Give all three cars a closer look.

By Robert Schleicher



15 year old Charlie Woodard of Whittier, California started with a stock Johan Rebel kit and added and added and added. Lettering and filigree are LetraSet dry transfers. Engine and chassis is FULLY detailed. Sponsor decals are from kits.





Charlie Woodard's "Flying Dutchman" Dodge Charger uses body from MPC's Mr. Norm funny car kit with chassis from Joflan 4-4-2. Olds funny car kit. Drafting and artist supply shops carry the types of dry transfer letters and markings used on all three of these cars.



Carl Hanes, also from Whittier, California, assembled and detailed this 1/25 scale "Super Chief" Dodge Charger. Carl is 14 years old, but a very sage modeler. He searched out those fantastic roof and side patterns from among the Letradet dry transfers. Chassis is a lengthened version of Joflan's 4-4-2 Olds with the engine converted to a Hemi. Body is from MPC's Mr. Norm funny car kit. Check the wiring and gas, water, and oil lines on ALL of these cars!



NAMRA World



We are forced to start this month's column with an apology to both our readers and MCS for having missed last month's deadline. It does not happen often, but this past couple of months have been very busy. We here at NAMRA headquarters have been swamped with letters about the new NAMRA Formula.

We are, and have been, quite aware of the high cost of racing and while others have been talking about it we decided to go ahead and do something about it. The response has been terrific and we wish to inform any of you who have written and not yet received an answer to please be patient. There is no paid staff here and we are getting to all the mail as quickly as possible.

For this month's race report we go once again to one of NAMRA's favorite track sites, Nutley Model Car Raceway, and host Mike Tango.

We still don't know how, when, or why disaster struck, but strike it did and though we know it happens in big 1:1 racing it was the most frightening spectacle these tired old eyes ever witnessed. Ten cars, race tuned, and prepared by builder drivers who are not new at the game wiped out, one after the other, due to motor failure. It was an expensive game, with \$200 worth, at the minimum, of motors going cough. Here's what happened.

Race day weather was beautiful. The Nutley track, as always, one of the finest in the country. The cars, one of the handsomest bunch of Can-Am cars assembled and everything seemed perfect. Registration and tech inspection, with the usual moaning were over with quickly and the eleven best cars were taken out for concours judging and picture taking. Concours turned up one item that had not been noticed by this writer while visiting the tech table. Many of the cars were now equipped with the new NAMRA wide front tires.

Both NAMRA approved brands were in evidence with an equal sprinkling of Berlinbach and Roer specials. These new tires, as has been explained in recent NAMRA construction articles, permit not only a much more scale appearance but, being made as they are with a slight angle to the tread surface, allow for a wider tread on the track while not throwing the car out of scale at tech inspection.

Overall concours winner was once again Jose Rodriguez who had from somewhere come up with an old Lancia Ferrari 330 roadster that gave him both the starting point for a good looking entry and lots of room for tread underneath.

Qualifying got under way. Suddenly a paddock of sidelined cars started to appear as many cars gave up to excessive motor heat and its related problems. Those who suffered enough heat to melt the solder of the pinions were soon back in and trying again. Others, however, had to retire for the day with motors hot enough to fry eggs on.

The overall number of retired cars was so excessive that the day's activities were limited to two events - a semi and the main. One driver, who suffered a problem never seen before, claimed the distinction of having what must have been the hottest and toughest motor ever wound. This particular motor got so hot it completely melted the solder joints on the motor bracket and parted company with the rest of the chassis coming down the straight. And that's HOT!

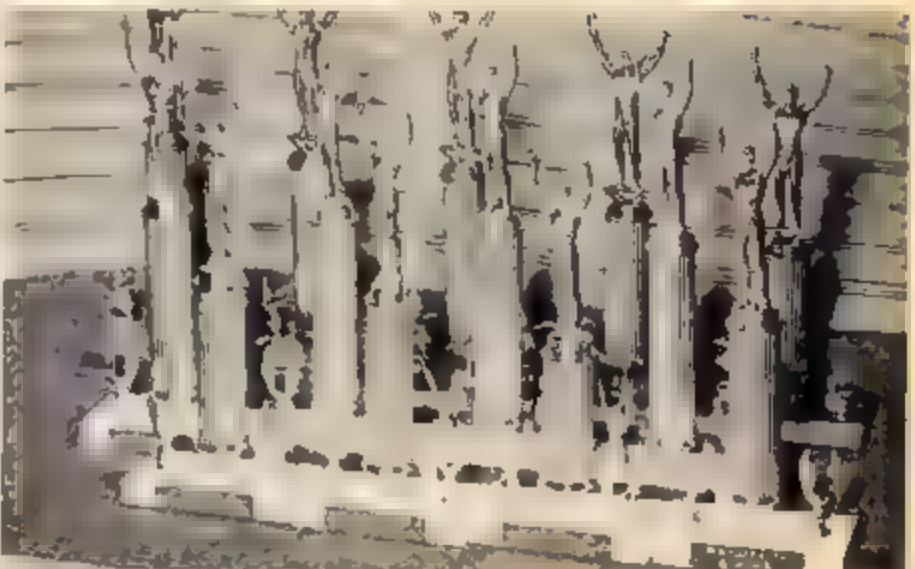
When that tell-tale aroma had finally been cleared from the room, the remaining drivers approached the track with an understandable air of apprehension and those who remained made up a very mixed batch of drivers indeed. Dom Peluso with a Lola T-70, Ginny Encke, now of Ginny Bodies fame (painted shells) and her rivet-studded King Cobra, Jose Rodriguez with his Ferrari 330 P4 and Ed Lamp with a very fast P4 coupe.

The first segment saw Rodriguez charging into the lead with a look of "burn it or wix it" on his face, followed by Peluso who will chase after anything in sight. Encke and her Cobra and Lamp and his P4 hurried to catch up. Rodriguez told us later that it's bad enough being chased by kids half your age, but when one of them is a pretty young girl with a car that looks like it could do you in, it's very,

NUTLEY MODEL CAR RACEWAY



Through this door pass some of the fastest slot racing cars in the world. Welcome to Nutley Raceway.



The sanction is NAMRA's, the sponsorship and awards belong to Model Car Science.

very hard on the heart

And so it appeared, with Ginny Encke passing the now second-place Peluso and showing a turn of speed down the straights that was obviously faster than the Rodriguez car. A little better control on the corners gave the first segment to Rodriguez with Peluso, who had gained second, enjoying a slight lead over Encke in third. Ed Lamp, whose car had suffered a great deal more than anyone had realized during qualifying, had pitted after the first seven laps with some sort of mechanical troubles from which it was never to recover.

The second segment went pretty much as the first except Lamp was still trying to get his car straightened out. Ginny had succeeded in passing Peluso and was beginning to go after Rodriguez when the buzzer sounded. The finish was still Rodriguez in the lead, with the next two Encke and Peluso.

The third segment was the beginning of the end for Rodriguez when excessive heat finally parted his pinion from the motor shaft and he had to pit, yelling for a soldering iron. Peluso, who was now smiling from ear to ear, soon fell victim to that high pitch scream of free running motor when the same trouble befell him and Encke, still strong, roared over the line taking the third segment easily.

The fourth and final run of this event came too soon and their still very hot motors. Just as the go signal was sounded, Rodriguez realized it was over with one very dead car. Crown men sure do scream loud.

Peluso, still with a very sick car, nursed it around with a "glad to be alive" second and a total of only 18 completed laps on this final segment. Encke, just to show the boys how, went on to win with the second highest number of laps she had run for the entire race.

So much for girls, and strong motors. The main event was held up for a while with the NAMRA race directors conferring with raceway owner Mike Tango to see if they couldn't come up with some reason as to why so many cars were retreating with over heating problems. Track, power supply, wiring, all were checked and found to be ok.

The main event was started with Charlie Cross wearing a rather evil (but not well-known) smile, Frank



NAMRA's new and mod official score keeper gets a check from an early qualifier



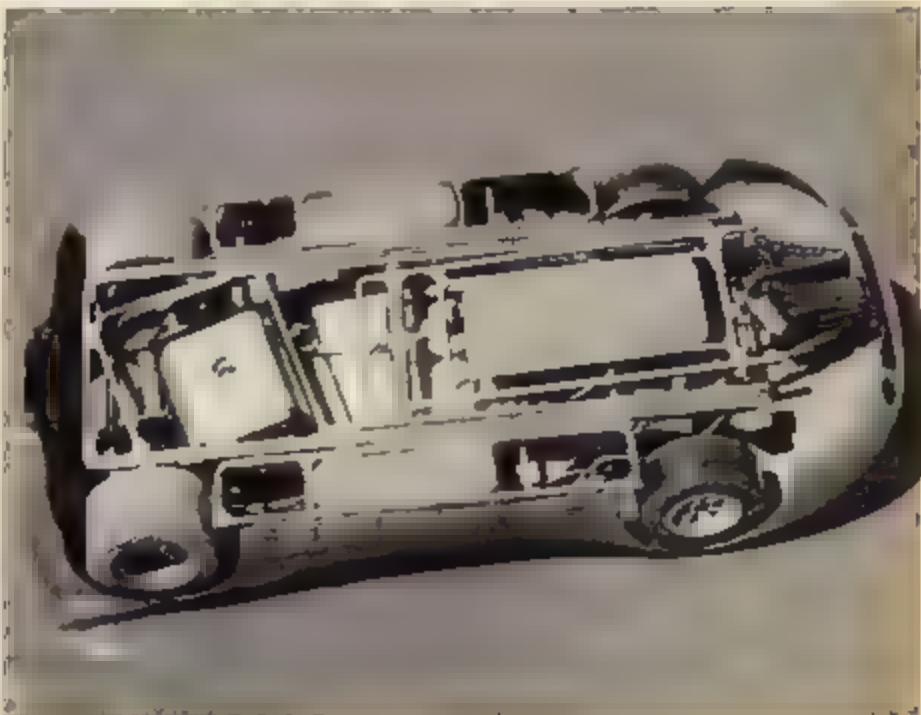
Don't let the long hair and youthful looks fool you! They build and run some very fast cars.



The other side of the age barrier catches the main event contestants before they know it



The Encke Cobra shows the girl can solder with the best of them.



Bianchi's pride that ate itself alive this time out.

Bianchi grinning over his infamous Ferrari that has been smashing NAMA records wherever it runs, Charles Bottjer with a new (and very fast) Honker, and Ed Benardella who is after the NAMRA crown this year.

The start of the first segment of the main got under way with Bianchi taking his expected immediate lead, followed very closely by the rest of the field, all running under a blanket.

Bianchi who spends as much time telling off Cressi as driving, paid the price. Examining the construction of the walls as often as he did Bianchi allowed Cressi to close up enough to really begin to put some pressure on him. Cressi finally passed Bianchi and so busy were they that neither noticed as Bottjer quickly motored by to take them both by one ap. And so the first segment read, Bottjer, Cressi, and Bianchi and Benardella third.

The second segment got off pretty much as the first except that Benardella began to go faster, passed Bianchi and was beginning to pass everyone else when a moan from Bianchi notified everyone within a half a mile that his piston had let go. With Bianchi now in the pits, Benardella flying, and both Cressi and Bottjer trying to race, yet conserve it, the segment ended up with Benardella taking first with Cressi second and Bottjer, who had slowed down, third.

The third segment got started without Bottjer, whose car had also given up the fight. There was no contest this time out with Benardella holding the lead all the way, Cressi several laps behind, secured second and Bianchi, who was still complaining about gear mesh, third.

The final round came around all too soon for everyone, and everyone wondered if anyone make it for the distance. Bianchi was immediately hit with gear trouble again, this time a melting spur. Cressi, determined to finish, slowed to a parade pace and Benardella, not out to set any time records, cooled it considerably. They finally crossed the line quite the worse for wear and Benardella had taken another NAMRA event. Cressi was in for second, several laps down, and Bianchi, who by now must have been running a pure friction drive, toured in for third.

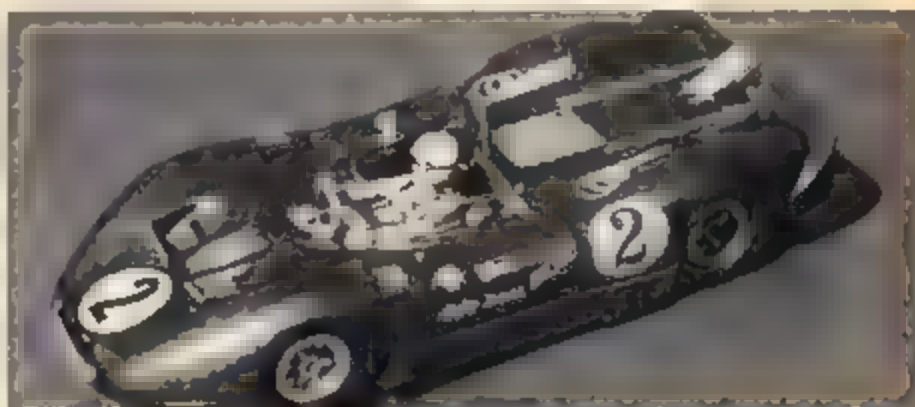
Quite a day, quite a total. We have no explanation, we wish we had. No one liked to give it up this way. We are still looking for an answer.

Some late news: East Coast slot racing equipment manufacturer, Phaze III, recently released a 1/32 angle-winder chassis to NAMRA specifications. The little chassis has been tested and found to be very competitive right out of the box.

Mini-Wheels of New Jersey, Auto World of Pennsylvania, and Twinn-K of Indiana all were recently awarded the NAMRA - HOCCE seal of approval for much of their equipment made for HO racing. More information on this in this month's HOCCE WORLD column. 1



Top and bottom of the Rodriguez Concours Ferrari.



The good looking Bottjer Honker



The Concours line up ready for judging.

The survivors.



HOCCL World

If the HOCCL racing season seems to be dragging by for you, it's only because we have scheduled six bi-monthly races for this year. As this is being written, (May) we have only had our first of the season reported on in the June issue of MCS. April was an open date with no scheduled event and it would appear no one wanted it badly enough to come forward with track facilities.

The next event, is slated for June 23 at Hobby House, Monroe, La. This one should be in the record book as you read this.

There being no race report this month, we will go on to some very important news for all our members and those now considering membership. As you read in the June issue of MCS, membership in HOCCL is now reduced to \$1.00 per year. We hasten to add that the special subscription rate to MCS, HOCCL's Official Voice, is still \$3.00 additional. We can't do anything about that one but where

today can you get a better package deal for only four dollars?

The often mentioned new HOCCL rules handbook is now in final draft form and ready for the printers. The need for a new rules book was quite evident to most of our members, as well as we here at HOCCL Headquarters. It has taken quite awhile, for many reasons, but now we are ready and we think you'll find the new edition the most complete HO rules book ever written.

You will notice when you receive your new book that we have taken on some HO equipment manufacturers as associate members. Now what does this mean to you and the manufacturer? First off, every manufacturer who has joined HOCCL as an associate member is urged to submit new products for our evaluation and suggestions. HOCCL's competition committee then examines the products, tests them and sends a report back to the manufacturer telling him of our findings and recommending any changes we think advisable to make it a better product for you, our members and their market.

When a product meets with our specifications and approval the manufacturer is entitled to display on his packaging the HOCCL-NAMRA seal of approval that will tell you his product meets with all HOCCL requirements and is accepted as HOCCL approved equipment. It will make the manufacturer's job easier and give you, the racer, a quick check on the best equipment available.

So far, and we know there are more on the way, we have accepted the following companies as associate members: Auto World, Scranton, Pa.; Twin-K, Inc. of Indianapolis, Indiana; and Mini-Wheels of Highland Park, New Jersey. We shall continue publishing names of other associate members as they come in and a full list will appear in the new HOCCL rules handbook. We know that you along with us, welcome these first three manufacturers and may we suggest that you

support them as they have seen proper to support you, and your organization. HOCCL HOCCL feels that this is the first step in helping the manufacturers to spend all their efforts in preparing race quality equipment that will be accepted as meeting legal standards. It will take much of the costly guess work out for the manufacturers and help put those dollars into new and useful equipment that will be accepted. Both the manufacturers and we will realize that some of their existing equipment does not now meet HOCCL standards and this equipment is not approved, nor allowed to use the HOCCL-NAMRA seal of approval which is reproduced here for your benefit.

We should now like to take this opportunity to urge any manufacturer who has not joined HOCCL to reconsider his position. Associate membership in HOCCL means you will every month be reaching thousands of HO racers. And by the end of 1969 we expect to have reduced several million readers and potential home club racers in HO. Two Associate Members have already offered to distribute HOCCL information and applications to their entire mailing lists.

Rumor department: It has been said that one of the largest manufacturers of HO equipment is about to introduce its own HO club. We wish them well whatever they intend to offer. Looking back over the years of confusion in the larger scales, with several different organizations pulling in different directions, we can only hope that this is not what is in the future for HO racing. In any case, HOCCL will continue to stand as the only non-profit enthusiast-run HO organization in this country, serving several thousand dedicated racers. We have no products to sell.

Some of the very first samples received here at HOCCL Headquarters to receive the HOCCL-NAMRA seal of approval are:

Auto World

Plastic HO driver heads
HO decal sheets.

Mini Wheels

Solid brass HO racing pan.
HO Go-Tires (small size)

Twin-K

The following tire and wheel combinations packaged individually or in sets:
TK-707 tires
TK-110 mounted silicone tires
TK-211 mounted sponge tires.
TK-310 Marauder tires mounted

Next month a race report and further news about our associate members and their HOCCL-NAMRA approved products



NAMRA H.O.C.C.I.

RACE APPROVED

Model of the Month

HOW TO ENTER OUR CONTEST

You can win a \$25 Savings Bond if you win first place in our contest! Simply send a sharp black and white photo (no color, please) of your favorite model car, along with a description of what you've done to it. Be specific when mentioning the parts you used, as other readers are interested. Send your photo and description to: "Brick" Price, Contest Editor, 11795 Gateway Blvd., # 3, Los Angeles 64, California 90064. Sorry, no prizes for other than first place, except the pride you'll feel when you see your car in the pages of MCS!



This month's winner was extremely difficult to choose. When the mound of mail was narrowed to the finalist we found ourselves with one entry from every category conceivable including a Continental .lmous.ne!

Mike Schramm, of 3 Cholwell Place, Norwalk, Conn. 06851, bagged this month's prize with a clean and well-detailed IMC Chaparral 2E. The power plant is Chevy's potent and popular 427 CID V-8. The carburetors are drilled, flared and outfitted with fuel lines terminating in "T" fittings. The headers are finished with flat white to simulate VHT paint and chrome plated

brass tubing. All of the shocks are functional and made to resemble Konis units. The seatbelts and shoulder harnesses are made with cloth tape while the buckles are hand carved. All scoops are functional as are the doors, removeable body, and spoiler. Good workmanship, Mike! Your \$25.00 Savings Bond is on the way!

This rugged-looking Grand Prix car is the work of Eric Watral of Garden Grove, California. The suspension is made from piano wire and brass tubing. The exhaust pipes and injectors are made from aluminum tubing. The stock four-speed box was lengthened to duplicate the more popular six-speed unit. Super detailing includes valve stems, gear-shift linkage, engine wiring, fuel and brake lines.



Chris Geiger of North Merrick, New York, sent us several nice looking cars this month but this was our favorite. Although it looks like a sports car now, it was once a 1964 Buick! The bodywork includes sectioning, channeling, and chipping. The chassis and 283 engine are Revell items. The paint is five coats of candy red over gold. Real nice design, Chris.



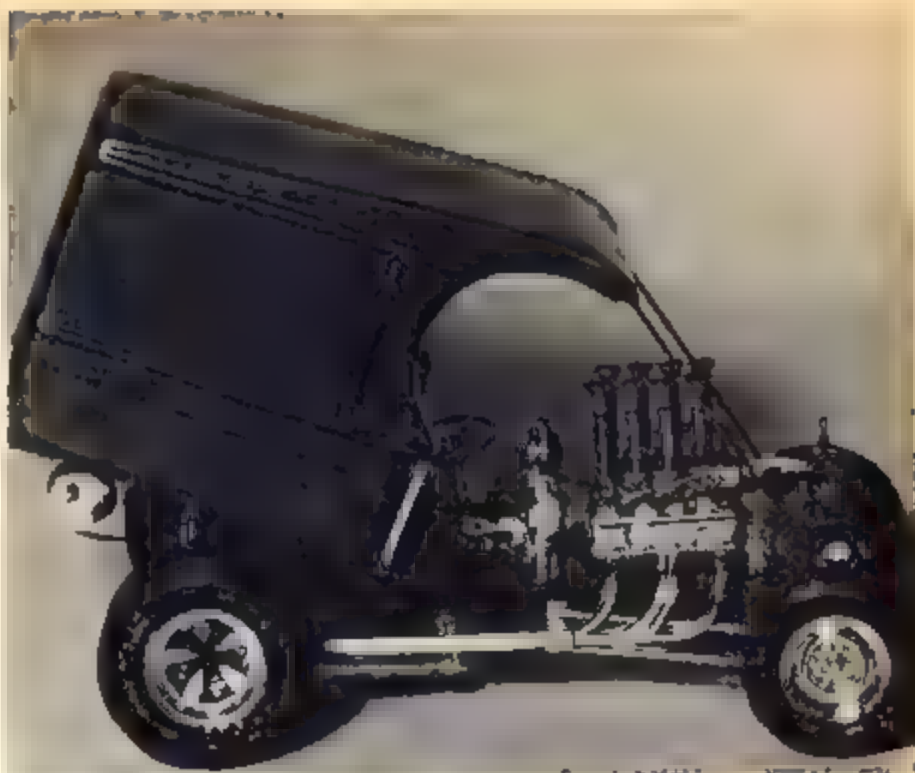
We don't often receive motorcycle entries (much to our dismay). But when we do they are pretty sharp. Mark Davidowitz hails from New York City and his bike is based on Revell's three-wheeler kit. The body is formed from Plexiglass and the extended front end was fabbed from aluminum tubing.



Building a realistic model of an existing stock car can be more difficult than a full custom. One example is this neat Continental Limousine built by Robert Blakely of Canton, Mass. Lehmann and Peterson are responsible for coachwork and whopping 160" wheelbase on the real car.



Dave Frazell of Hudson, Iowa, combined the art of scratch building with kit parts to build this wild street rod. The body is built of Balsa, as is the interior. Wood trim, sides of the body, and back doors are made of walnut while the floorboard and fire wall are mahogany. The interior is upholstered in corduroy, leather, and haughide. The frame is from a "Tweedy Pie" kit and the engine is from Jo-Han's Plymouth. Fine craftsmanship, Dave!



Gordon Atkinson of Fredericton, New Brunswick, built this clean 426 hemi powered '67 Barracuda. The features include chrome wheels from '66 Chevy kit, slides from a '58 Chevy, rolled pan and a moulded front end.



Born machines must be an Atkinson family trademark! Ralph Atkinson did a fine job of detailing his '67, 327 'Vette. He went one step better than the normal super-detailing route when he added a working dip stick. The velocity stacks, traction bars and roll bar are all AMT Camaro items.



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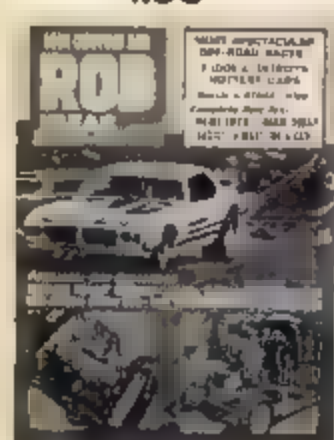
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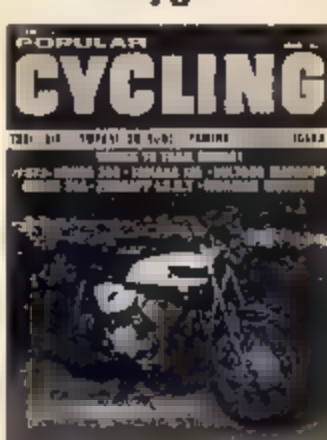
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THE AMERICAN COLLECTOR

By David Sinclair

A limited supply of Rio BUGATTI ROYALE (1927) Type 41 had arrived in U.S. prior to the longshoremen's strike but only a few collectors were able to obtain them at that time. Now they are beginning to come through again so we are going to treat them as "New Arrivals" and review them this month.

While Ettore Bugatti was already famous for his sports and racing cars by 1927, he wasn't satisfied. He had a dream of building the most luxurious motor cars ever seen and expected them to be eagerly purchased by the royalty of Europe.

The "Royale" was probably the largest passenger car ever built. It was 20 feet long with a 66 inch track and the outside diameter of its tires, mounted on cast-aluminum wheels, was 40 inches. It had a huge straight-eight engine producing some 300 horsepower at only 1700 rpm and in spite of its size was said to have handled like a sports car.

Bugatti was able to sell only seven "Royales" at some \$30,000 each and none were purchased by European monarchs. Even for kings, \$30,000 was a lot of money back in 1927, but anyone who might have bought a "Royale" could have enjoyed driving this magnificent car for 40 years and then sold it at a healthy profit. Only recently one of the six "Royales" still in existence reportedly changed hands for \$60,000.

Each of the seven "Royales" had different coach work. Solido immortalized a Sedan de Ville with glass-panelled roof in 1/43 scale a few years ago and now Rio has chosen a roadster as their offering to the miniature classic car collector and has done their usual superb job. This Italian firm undoubtedly offers the most intricately detailed 1/43 scale cars in the industry, each of their models is assembled by those "fine Italian hands" of from 60 to 85 individual parts. We are glad to see Rio has gone to metal fenders on this model rather than the plastic fenders they usually combined with metal bodies on earlier releases.

It really didn't miss a detail. The BUGATTI has twin chrome trumpets mounted in front of the radiator. It has realistic lenses in the headlights. The big engine is well detailed even to the tiny four-bladed fan and fan belt

and the steering post comes through the fire wall realistically. There is a triple-plated chrome windshield wiper, both doors open, instruments can be seen on the dashboard, gear-shift lever, squeeze-type handbrake, seat backs tip, license plate and there's even a chrome handle on the trunk. Rio's BUGATTI ROYALE is offered in two versions: top up (36) model is off-white with black top and upholstery, open version (37) is chartreuse with black top.

Mercury of Italy improves their quality with every new release, pushed no doubt by the competition of Politoys and Mehetoy. Their new PANTHER BERTONE is a 100% improvement over Politoys' version which is of course not really a fair comparison since Politoys' PANTHER is in their "Export" series, a lower priced, less detailed line. The Mercury PANTHER has a very realistic removable over-head spoiler of unpainted metal with rivets visible and attitude adjustable. Practically everything opens including the doors, and the engine boasts some of the best ignition wiring detail we have seen. The sample reviewed was orange with white trim along the bottom.

Sablon of Belgium's LAM BORGHINI MARZAL far surpasses an earlier version which was also one of the Politoys export series. Everything opens including the two clear plastic gull-wing doors which give access to all four bucket seats which are nicely detailed as is the front-to-rear console. Unique off-set hinging on engine and luggage compartment, well detailed engine and "venetian blind" rear window. The review sample was all white.

Gama of West Germany sends the NSU Ro 80, the first car specifically designed for the revolutionary WANKEL Rotary engine. While the body is fairly well done, the doors open and engine is detailed, the "dashboard" is simply a slab of plastic from windshield straight to the floor and the headlights are chrome, not jeweled or lensed, which means we can only give three stars to this one.

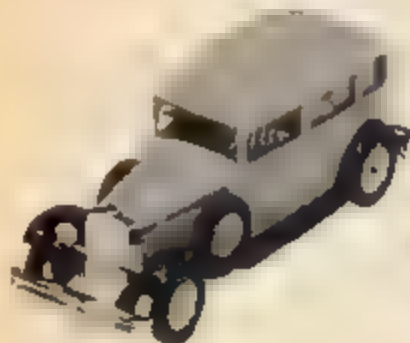
While some collectors tend to look down their noses at plastic models, Norev of France does a superior job with this material. Almost all of their models feature spring suspension, glazed windows and many have opening doors, hoods or trunks. Of particular

interest is their recent release of the famous Mercedes 55K (150), the first to our knowledge with top up and we frankly much prefer it to Gama's metal version (987) which not only has very crude windshield post detail but is a good deal larger than 1/43 scale. Norev's 55K has twin chrome horns and exhausts out of the hood as well as wire wheels. You can make out every louvre on top and sides of the hood, the interior and license plate are detailed. There are precious few miniatures available in the era of the 1920's so Norev's 1928 Fiat (146) and 1927 PANHARD (39) sedans are of special interest. Both feature six chrome wire wheels and the low silhouette PANHARD has removable hood, detailed engine, big trunk, and round rear window. Just arrived is Norev's newest, 1925 RENAULT NNI Touring car (78) on which the famous old tapered RENAULT hood is hinged to open and show the tiny detailed engine. Another of our Norev favorites is the 1936 CITROEN sedan (29). If you have ever seen an old French movie these are the cars the Paris Police used. The model has hood hinged at the center so that each side opens just like the old cars usually did.

For several years a few of Tekno's 1/43 models have incorporated an exclusive feature which allows them to be "magically" dis-assembled without screws into some 15 individual parts. Thus they are not only good scale models but puzzles as well and re-assembling is fun and challenging. The take-a-part models are offered in a MUSTANG convertible (833), MERCEDES 230SL (top down-928, and top up-929) and MONZA GT (930). The MONZA is also available in beautiful all-chrome version (931A). While Tekno of Denmark introduces new models only occasionally, their attention to detail and scale is among the best. If you collect city bus models you won't find a better one than their modern SCANIA VABIS bus (851). The driver and every seat are detailed, front and back doors open, engine compartment opens to show detailed engine. Tekno's two FORD tilt-cab trucks are superb. One is a dump with automatic dumping action when pushed backwards, the other is a stake truck with removable or drop-down side and back rails (914 and 915 respectively).



Rio BUGATTI ROYALE 1927
(36 & 37) Metal ****(Rating)



Norev FIAT 1924 Sedan
(146) Plastic *** (Rating)



Norev PANHARD 1927 Sedan
(39) Plastic *** (Rating)



Sablon LAMBORGHINI MARZAL
(6) Metal ****(Rating)



Mercury PANTHER BERTONE
(68) Metal ****(Rating)

An aspect of the hobby of collecting die-cast cars which is popular in Europe but not yet widely practiced here, is modification of the manufacturers' products. Scratch building is the art of the very skilled modifying die-cast or plastic models which are easier to work with, offers a real challenge to the collector who enjoys creatively working with his hands but is not yet ready to build each piece from raw stock as is necessary in scratch building. Some European collectors, for example, enjoy transforming a sedan into a dual-cowl phaeton, a roadster into a limousine or a touring car into a truck or hearse. At the annual meeting of IAAM* (International Association Automotive Modelers) in Niagara Falls, New York this fall, The Sinclair's Auto Miniature Trophy will be awarded to the best modified 1/43 scale car displayed side by side with the manufacturer's original.

Dioramas are also popular in Europe. That is, displaying car models in imaginative scenic backgrounds. I saw a remarkably realistic one in Paris, a wreck scene complete with smashed fenders, shattered windshields, ambulance, police car, victim, ambulance attendants, police, trees, etc. These can be a great outlet for your imagination and skill and a much more effective way of displaying models than simply standing them all in a row. Another diorama could be a modern or antique auto show in miniature with featured cars on roped-off stands or turn-tables. I'll be writing more about this in future columns and perhaps have some photos for you.

A collection is much more fun if it is shared with others. Almost everyone, young and old is interested in cars, especially vintage models, as I found out when I took my first Glidden Tour with the Antique Automobile Club of America two years ago. Your local museum or school would probably appreciate your offer to set up a display of "The History of the Automobile in Miniature." Each car should have its name and date of manufacture on a little sign and if you start with the 1878 AMADEE BOLLEE by Rami you could actually depict 90 years of motoring in scale replicas.

For some time after the longshoremen's strike was settled, the huge backlog of shipments on the docks kept new models from being delivered. But the "Little Gems" are beginning to come through again and next month we'll have reviews and photos of the FORD MARK II by Mebeto, the MANGUSTE de TOMASO and DUESENBERG sedan both by Solido.

*The I.A.A.M. dues are \$5.00 per year. Contact Norman Shearier, I.A.A.M. secretary-treasurer, 4412 South Mozart St., Dept. MCS, Chicago, Ill. 60632.

the Tech Sheet

My mail indicates a few trends taking place and all of them shaded with well-founded criticism of me.

The first concern the many letters I get from H.O. scale enthusiasts saying I am forsaking their scale and prefer to deal with larger scales. If I make mention of some motor or car I've built up in H.O., they immediately want to know more about how it was made and deliver something short of an ultimatum for a long article with pictures included showing step-by-step construction.

I must admit that this criticism is probably valid, especially when I consider that the volume of H.O. mail far outweighs the other two scales combined, but there are other considerations which I must take into account besides volume of mail.

First, there is a question of how many people would or could duplicate an H.O. car I might build up. If the project required a lathe then this would automatically eliminate a large segment of the readers who might want to build the car.

The other aspect of this problem concerns what could be described as a prejudice on my part for larger scales. This partly is due to the limited amount of equipment available in H.O.

Certainly there are replacement magnets, hop-up armatures and now belly pans available, along with a variety of tires, axles, pickups, etc., but basically all the things are add-ons to only one H.O. car — the Aurora car.

Admittedly, all of these items make the Aurora car either go faster or in the case of belly pans, make the car handle better, but there are three very glaring faults which still remain after all the add-on speed parts have been installed.

We still end up with the same plastic frame or chassis. Also an excess amount of friction remains in the whole drive line. And we still have the magnets isolated from each other.

The advantage of a belly pan such

as sold by Mini Wheels (.015" thick) or the heavier pan by Phase III (.025" thick) clearly demonstrates the need for an all-metal brass chassis rather than the present plastic frame. If either of these belly pans were bolted loosely to the present chassis the handling is improved considerably and an all-metal chassis would enhance handling characteristics even more because the weight would be concentrated still lower. (I understand Champion also has a similar belly pan in the works though I haven't seen it yet.)

The next item is friction. Just for experimentation, about a year or so ago I installed tiny oilites on all bearing surfaces which previously had plastic surfaces and installed A.J.'s wheels, tires and axles just to see what difference there might be in performance. The results showed that the car was almost as fast as a car with a hopped up armature, in spite of the fact that I retained the stock Aurora armature. I did substitute a very thin piece of aluminum in place of the plastic cover plate but this was just for ease of construction and weight-wise the two materials are probably comparable.

The third item of providing continuity between the magnets, involved removing of a considerable amount of plastic and fashioning a metal strip to go around the back side of each magnet and extend along each side of the car.

After completing this project, and analyzing the results, it proved (to me at least) that I would be better off just forgetting about the Aurora chassis and simply start from scratch.

I'm not at all sure how many readers would elect to go the scratch building route (some would, naturally, but these would be the more advanced modelers) so I quietly put the whole H.O. project aside in the "junk box."

What this project car of mine does point out is a real need for an all-new metal chassis with quality bearings, but so far the slot racing manufacturers in the larger scales have not decided to take this plunge into H.O. racing. I've talked to quite a number of companies about this but to little avail.

The market is there we all know this but the problem is trying to maintain a separate assembly line for H.O. along with their present activities in the larger scales and doing so at a competitive price.

This doesn't mean that Aurora's H.O. motor is the only motor in the world. No Sir!! There are old Tycoos and Atlas inline type motors and because the motor is a separate unit, these offer a world of modifications to be done to them, plus the opportunity of making your own metal frame or chassis easier. I think I wrote somewhere before where I used the thin magnets out of Dynamic G.E. motor in a Tyco type motor but here again I don't think many readers would go to the trouble of trying to pry these

magnets out of the Lexan plastic they are imbedded in. That's a real chore!!

Mabuchi's U.S. distributor, Polk's Hobby, has shown samples of an H.O. motor. Although I've got a couple of samples they are not on sale to the general public and at the time of this writing no company in the U.S. plans to import this small motor. It is true a number of companies are seriously thinking about H.O. cars using this Mabuchi motor.

The Mabuchi motor itself is about the size of a Tyco but with much thicker magnets and in stock form is not what you would classify (30 to 32,000 rpm) as being really fast. But the motor does show a lot of potential as a rewind. The magnets are strong enough so the side wrap-around metal case leaks magnetic flux (about 3 points on my meter) but this could be corrected with shims (it has a wide "air" in stock form) inside the "can" as well as extra metal placed along the rear. When I tapped the magnets on a big magnetizer the leakage increases to almost five points.

The Mabuchi case is already ".022" thick and with a ".035" total air gap between the magnets and armature we could easily slip a ".010" shim behind each magnet and come within our optimum ".007" or ".008" air gap on each side of the armature. Until this motor is made available to the public there isn't much point in writing up an article on it.

The strange twist to this story is that the H.O. readers are more excited about this H.O. Mabuchi motor than the two most logical companies are about importing it. I am of course referring to Mura and Champion because these two companies have both the resources and the rewinding-balancing equipment to do the job properly but their reluctance to take on the Mabuchi project is understandable as both companies are already "up-tight" with their own motors for larger scales. Of course if we ever will see the Mabuchi in ready to go hopped-up form, the cost is going to go up because all that winding and balancing doesn't come cheap. So as it stands now, I'd say don't hold your breath waiting for this motor.

The other route is to use the "N" gauge railroad motor in an angle-winder frame as was shown in the June '69 issue of MCS. Any number of railroad motors in "N" gauge could be used as they are all of similar size to the Aurora train motor used in the photo story that month.

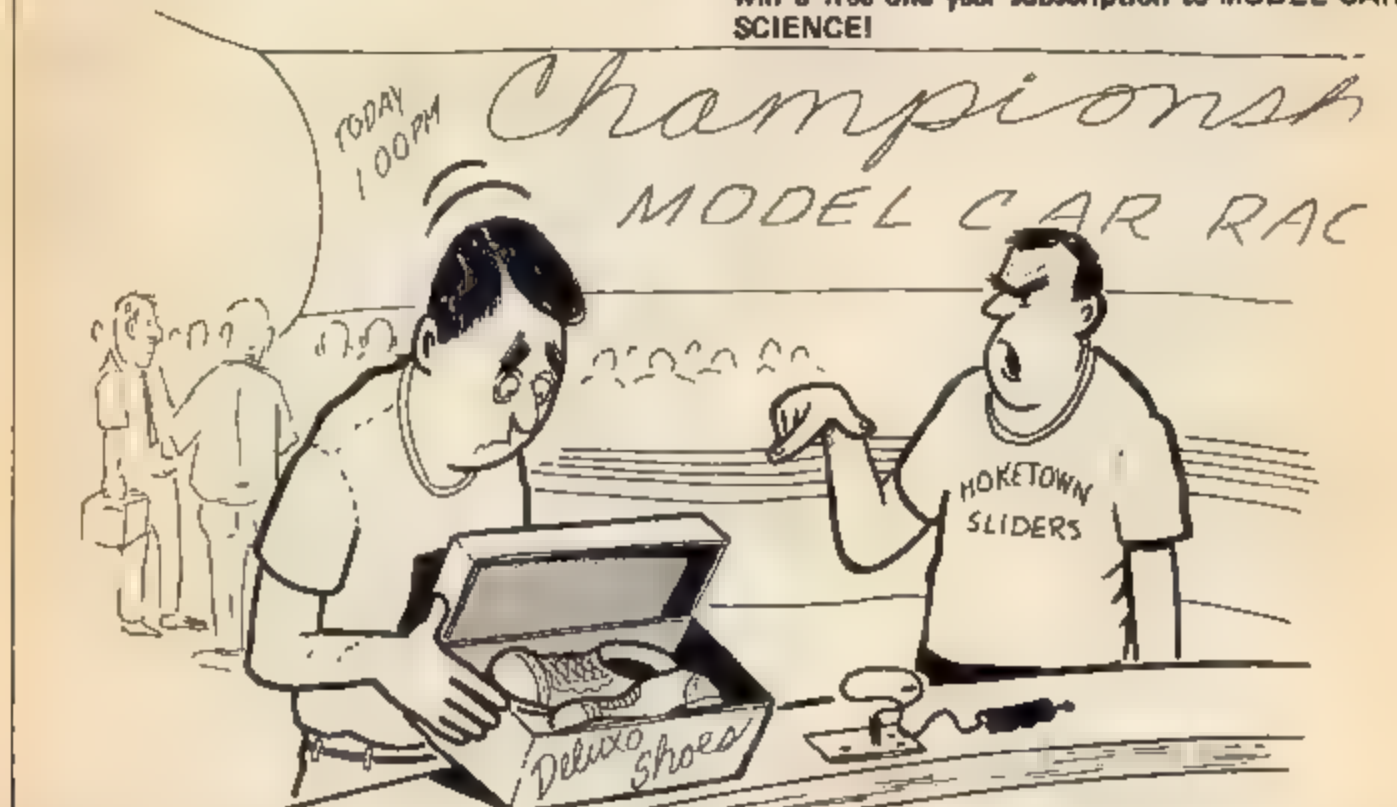
I'm something of a railroad fan myself and design-wise these motors are more adaptable as slot car motors than they are for trains. Model trains require a smooth starting torque and slanting the stack similar to what some do-it-yourselfer rewinders were doing some years ago accomplishes this.

I guess I could do more in H.O. to satisfy the readers and I'll admit I'm guilty of some back-sliding on this. Gosh, where should I start?

"CAPTION THE CARTOON" CONTEST

This is the simplest contest to enter and win yet! Just think up a gag line to this wild cartoon by Joe Puckett, then fill in the coupon and mail it as soon as possible.

If you don't win this one, watch for the next one. We'll be running one a month! And you can win a free one year subscription to MODEL CAR SCIENCE!



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August 1969/63

Inside Information

By Lynn Fletcher

Mike Steube has evidently gone out of the chassis building business. I understand he's going to bring out his own line of super products. Knowing Mike, they'll be good.

There has been a trend in the past year or so toward small specialized manufacturers like Checkpoint Zimmerman, Parma, Rehco, etc., all with good stuff, too.

A new name in West Coast body painters — Jim Kirby. Jim left a good position with Russkit to branch out on his own and try to fill the gap left by Kovacs, who is racing go-karts! Jim is painting Dynamic, Russkit and Lancer bodies. I've seen a couple and they looked real good. Ask your dealer for more information.

Both Zimmerman and Steube motors are now insulated with that "super green stuff" that Mura started using a couple months ago. They're both also welding the wires to the commutator. I've seen both set-ups; they're both different and efficient plus a couple thou cheaper than Mura's. These two guys never let up on each other and nothing slips by them

either. You won't waste your money if you buy from either of them.

Les Yurada, owner of Sinco/Associated, never even slowed down after we released his jet-flag. Now he's got a new injection-moulded angle-winder gear that's pretty different, to say the least. He's still talking about his laser beam balancer.

Now think about *that* one for a minute!

Lexan bodies are slowly gaining in popularity with the jet set. The currently available bodies leave a lot to be desired, detail-wise. I have it from a good source that Dynamic is going to release a line of Lexan bodies that will look good, too. I hope it's soon.

Jim Russell has just released a beautiful 1/32 scale Corvette ready-to-run. He has more 1/32 scale goodies in the works too. His "Rattler" chassis is selling very well. Jim told me that there are some changes in store for his Pro controller that will bring it up into the same class as those custom-built \$25.00 jobs. Sounds good.

At this time it looks as though the big race of the year will be at Buzz-A-Rama in Brooklyn, N.Y., May 30th. All the top drivers in L.A. will be there and it shapes up to be some kind of showdown between Cukras, Steube, Brady and Vitucci. Those battles are really something to watch. Unbelievable! Oh yeah, a \$7500 purse to divide up too!

That's it for now. More news next month. If you have information you want to pass along to me, send it to: Lynn Fletcher, C/O Model Car Science, 131 Barnington Place, Los Angeles, California 90049.

FASTERN VIEWPOINT
Continued from Page 15

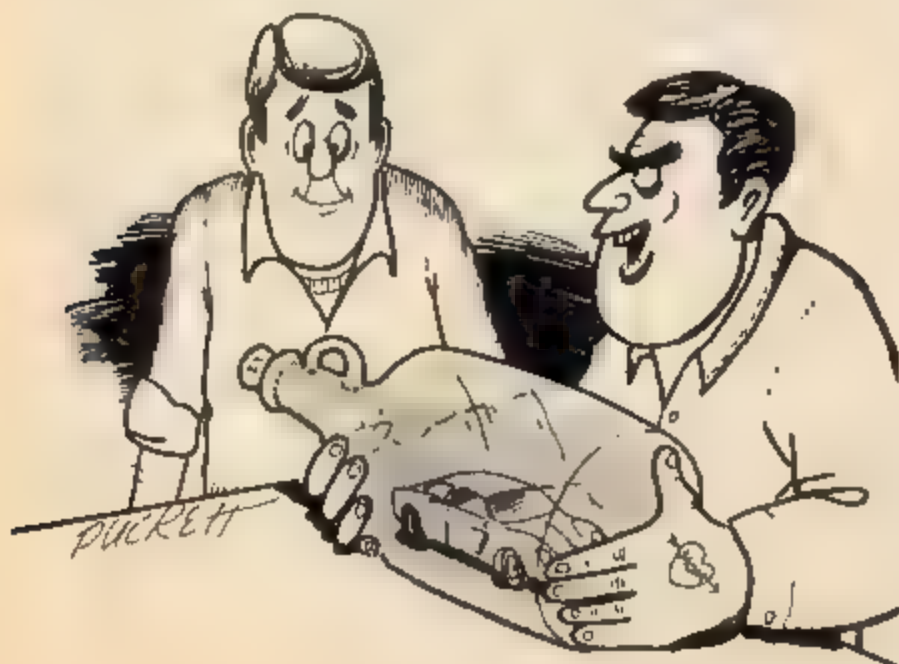
today are the best ever available. The motors hold together and it is not uncommon to watch 27, 26, and 25 winds powering these monsters 1/32 cars.

On most high-gloss, super-smooth home layouts that are built especially for these small beasts, a good motor is very critical, more so than on the large commercial raceways with their super cars and super power. The super smooth home club layout, built for 1/32 racing, are really smooth and offer bite like nothing you have ever seen in a commercial raceway. No tire slipping here, no textured surface of any kind to break traction or to keep it at anything but maximum. And so, you have instant and continuous grip all around the course. This plus heavy chassis and high strung motors often make for "instant motor cough" for any motor less than perfect. You can get away with more on the big commercial tracks where bite, though often good, is never the equal to that of a smooth surface track. The commercial layout will offer those motors with enough power to spin their wheels to do just this regardless of the weight factor, and so the load is kept down and the motor lives just a little longer.

Sound bad? Not really, it's just a slightly different form of racing, this 1/32 thing. It requires the best motors that can be had and heavy chassis. In fact, much heavier than most chassis manufacturers think necessary. And baby, since it was proven to me that wings, fols, etc. on slot cars cannot effect handling until speed of 80 mph *actual* are reached, I'll put my money on weight, where it does the most good.

So where to from here? We have shells, chassis, tires, wheels, gears and all the other little hardware that's required. We even have motors, big 1/24 motors that is. This would be the ultimate, offering a 1/32 scale motor capable of packing all the sock of the latest 1/24 ones, at least the same amount of reliability now available but of smaller configuration so that it could really be fitted into a 1/32 car properly. It sure wouldn't hurt any 1/24 racer to have a smaller overall motor. Just think, real Sidewinder, not angle-winder.

Wishful thinking? I'm afraid so, at least for quite awhile. Motors, newly designed ones, come high, so terribly high I don't know of any company now in business that has actually designed a new one complete from the ground up in one shot. That's what most of the 1/32 racers in this part of the country would like. At least, that's my Eastern viewpoint.



"Actually, the toughest task of all was draining the bottle first!"

USRA News

HAPPENINGS AROUND THE COMMERCIAL TRACKS

If you've been associated in any way with 1/24 scale commercial slot racing in the past two years, you've probably heard about the U.S.R.A., or more formally, the "United Slot Racers' Association." But for those of you who are not familiar with our association, I'll try to describe it briefly.

The U.S.R.A. was formed in December, 1967, by about 30 Los Angeles racers, to fill a gap in slot racing's organization that had been widening since late 1966. The original idea was to draw up a set of practical, usable slot racing rules and regulations and to apply these rules to a regular race series in the Los Angeles area.

Well, to make a long story short, the rules and races were very successful. As our local membership grew, we found that other cities across the country were forming U.S.R.A. chapters. Regular race series were established where there had been none before.

One major problem still stood in the way — a set of truly national rules, drawn up by all the responsible people actively involved in commercial racing, was definitely needed if slot racing was going to expand to its full potential.

In November, 1968, representatives from 13 companies and three publishers met in Downey, California and formed the National Championship Rules, by which all commercial slot racing of any consequence would be governed. And to back it up, the National Competition Committee was formed. This group's function is to decide any rules changes (annually) and to act as a clearing house for race scheduling across the country.

As for my part in this, I've been fortunate enough to be president of the Los Angeles chapter of the U.S.R.A. for two years and also to be a member of the National Competition Committee. Each month I will attempt to keep you up with what's happening in the U.S.R.A., our current projects, future projects, and ideas which might help you and the racers in your area promote more and better racing.

If you've been a regular reader of *Model Car Science* you know that this is the second year that this magazine has sponsored the Los Angeles Championship Series, which, incidentally, is in its fourth year and is the oldest commercial race series in the country. Names that were mentioned in last month's race report can also be seen in 1966 Rod & Custom magazine issues! Some of these drivers have grown up in slot racing. It's in their blood and it shows in the quality of

racing in the 1969 U.S.R.A./M.C.S. race series.

Since the pro is so deeply entrenched in Los Angeles racing, the big problem since we began has been to involve the amateur racer to a greater degree. We established an amateur series which was kept separate from the pro series. The class of cars and track were the same each month, but the amateur race was held two weeks before the pro race. Points were given to each amateur driver who drove in the main event, on a graduated scale, similar to Formula One racing. Once a driver accumulated 20 points he was automatically advanced to the pro class. The system worked with fair success, but we improved on it by establishing a "semi pro" class between the amateur and pro categories.

Recently we formed the "Driver Grading Committee" to abolish our old, outdated amateur-pro system and devise a new, more equal system to encourage more drivers to participate in our races by racing against other drivers of equal skills.

All persons who had raced in the Los Angeles Championship Series in the past three years were listed and reviewed by the nine man committee who classified them in three categories: Pro, Semi-pro, and Amateur. A list of names was made for the first two classes and any person whose name did not appear on either list was classed as an amateur with the only exception being out-of-town drivers, who would be classified at the race when they entered.

The committee meets regularly and may re-classify any driver at any time by majority vote. A driver may appear his classification to the board but their decision will be final.

As of this issue we have not tried this system but the whole membership

has great hopes for it. It makes sense and should work.

As a further improvement on our races, we have established a minimum cash purse for the pro and semi-pro class with all merchandise and trophies going to the amateur racers. Also, all three races will be on the same day and each will have a full program consisting of consies, and a semi and main event.

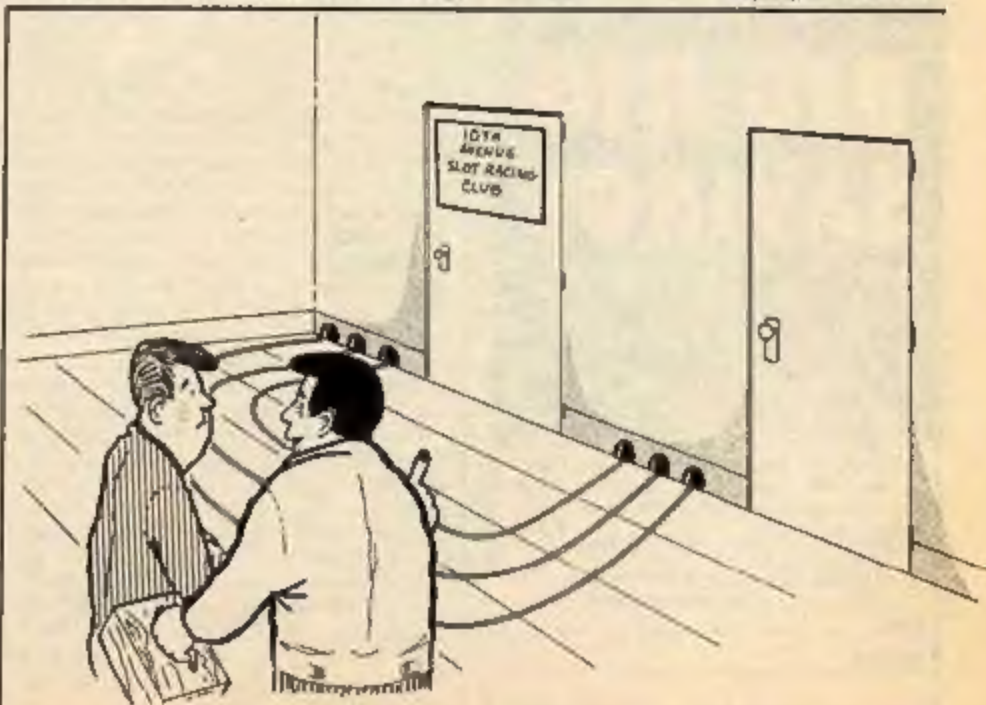
We hope that by July we can include a fourth race in our schedule — a novice race — which will be for ready-to-run cars only, and will be open to novices only — no amateurs. Next month we'll go into this more deeply. By then I'll probably have all the information and rules.

Other subjects I'll be writing about will include the proposed nation-wide pro series, to be set up at the July meeting of the Nationals Competition Committee in Dallas, Texas. Also, a manufacturers' championship has been proposed with the emphasis on the factory team and equipment rather than the individual driver. Just think about the merchandise which would be developed for a series like that! Another subject will be fund raising methods which you can apply to your own area to support local race series.

Until next month remember, stick and ball games are cheap to play, but slot racing is more fun!

P.S. A slot racing bumper sticker can be yours by sending 25 cents to: National Competition Committee, c/o *Model Car Science*, 131 Barrington Place, Los Angeles, California 90049. And if there are other things you'd like to know about, or discuss, or if you'd like U.S.R.A. membership information, write me c/o *Model Car Science* also.

By Lynn Fletcher



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Small Stuff

Okay kiddies, gather 'round and BVS will give it to you straight. Hope you enjoyed the last column, but that was just the warm-up lap. Send comments (pro and con) to:

Bill Von Staden

77 Sherman Ave.

Jersey City, N.J. 07307

I'll be looking for some mail right after this issue. Now down to some serious stuff.

First this month is the new Atlas chassis/motor combination. I would say car, but the bodies aren't new. I can hear you guys moaning in the background, "Atlas cars aren't competitive; who's he kidding?" Well, read on, man, I said NEW and I meant it. Oh, the motor is the "can" type alright, like those currently used by Tyco, Atlas and Eldon, but it's bigger. This includes the magnets, too. And you know what that means — more torque. They make the old magnets look anemic. The armature has three poles, as usual, but seems to put out more power than the older three-pole jobs. I'm sad to report that the gear arrangement is the worm-type. They still have a habit of locking up when the power is shut off.

Now on to the chassis. There isn't too much to tell; it just holds all the parts together. The chassis is where, I feel, Atlas goofed. Mine cracked near the side, a friend of mine's cracked up the middle, and still another cracked in half! The axle bearing holes are slightly large, and they wear too quickly. Installation of 1/16" diameter axles can be a real pain. If you try this, take your time, because parts are impossible to find for it. To identify these cars, I think you can go by this: they come packaged on a card covered with clear plastic, not the usual clear plastic boxes. One other thing, the stock tires are unreal. They are quite soft and are lettered "Continental" on the sidewalls. They really get the bite for stockers, too. Well, enough about the Atlas, they are very hard to find, odds are most of you people won't be able to find them for a while yet.

I know what you're all waiting to hear — good news on the Aurora Formula 1 mini-Jet! Well, I've got some news, but it may not be so good. The Mini, at first glance, can almost be taken for a T-Jet. But it is different, to say the least. Some of your usual hop-up tricks might not work on it. By shimmying the magnets, you'll throw them out of alignment so the gearplate assembly can't clamp down, so that's out. But they do fall out when you take the armature out, so they should be glued in. Of course, if you want to shim them and cut the locators off the underside of the gearplate, I guess it

could be done, but I'm not recommending it.

Hop-up gears, you ask? Yes, with a little work it can be done. Know what a hop-up gear (crown) for the T-Jet looks like? Well that's the stock gear for the Mini. To get the gear to "move over" to allow a twelve tooth pinion to fit, the spacer part of the gear should be taken down to a mere 1/32 of an inch. The regular cluster shaft is too long. The pinion should be pressed down to the bottom of the shaft, and the remainder after installation can either be left sticking out the top or cut off. It must be cut off if you intend to use the original body.

Silicones? They're easy. 007's can be popped right on. 110's can be installed if you first remove 1/16" of the splines used to hold the crown gear tight. Remove the 1/16" from the outermost part of the splines, not near the center of the axle. This is so the edge of the splines won't ride in the axle bearing in the chassis. Some of the further modifications won't be very difficult. To lighten it out, you can use pretty much the same techniques you use on the T-Jet. Oh, one thing I'd better throw in before I get a million letters about, is that to make room for the ho-up (homemade hop-up, that is) crown gear, the locating tab on the underside of the gearplate must be removed on the crown gear side.

Late News: AJ's products will soon have two tiny "AJ's" decals in each package of tires. Champion's HO axle spacers are out, and by the time you read this the followings should be ready: set screw silicone rear tires, two different types of brass pans, a building jig, a tek-chek, steel spacers, and the long-awaited "tiny Aroo" magnets. LaGanke has a new line of stuff, two things included are ultrawide sponges on aluminum hubs and a new gear ratio for the T-Jet. Aurora has a Alfa open car on the way.



WINNER OF THE MONTH

A one year subscription to MCS goes to the Rev. John A. Schively, of St. John's Episcopal Church, 1707 Goulden Road, Oakland, California 94611. His sixty-two foot layout is based on Aurora four-lane track, powered by four Aurora transformers. The lap record is 13.1 seconds. Due to the complexity of this beauty we're going to run a regular feature on the track, in depth, in the next issue of MCS. Watch for it!

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